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Review

# Sustainability Perspectives in Organizational and Workplace Learning Studies

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**Abstract:** The association between sustainability and learning in organizations and workplaces represents a current articulated grand challenge for human resource development (HRD) and learning studies and practice, which calls for integrated inquiries. However, studies of learning in organizations and workplaces deal with sustainability in scattered and diverse ways that promote calls for more integrated understandings of the different approaches and associations. This article outlines the results from a scoping thematic review mapping out leading perspectives within the research fields of HRD, organizational learning (OL) and workplace learning (WPL). This article thus explores the perspectives that have been used in approaching sustainability in OL and WPL studies. The analysis of the identified studies shows that OL and WPL research has utilized four different perspectives in the approach to sustainability associated with learning: (1) balance perspective, (2) dimensional perspective, (3) integral perspective, and (4) outcome perspective. Findings are discussed with the purpose of producing a deeper understanding of how sustainability and OL and WPL are associated. In so doing, this scoping review clarifies and deepens existing knowledge and themes, and provides potential for future practical action and theoretical advancement for HRD and learning studies.



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**Keywords:** organizational learning; scoping review; sustainable development; sustainability; workplace learning

## 1. Introduction

Sustainability has gained momentum worldwide in numerous political and business arenas because of the concept's latent capacity as a solution to some of the most difficult global challenges civilization has ever faced: poverty, inequality, climate, environmental degradation, prosperity, and peace and justice [1]. Currently, sustainable change and development represent deep-seated environmental, societal, and economic challenges that are not solved easily by existing practices or mere political or business consensus. Attention and action from the whole ecosystem, ranging from transnational bodies via organizations to individuals are needed, to meet these grand challenges in coherent and concrete ways. Seventeen sustainability goals (SDGs) have gained overall official political agreement and have been disseminated and applied on a broad scale globally to mobilize efforts to tackle these challenges 2030 [2].

In this article, inquiring into sustainability perspectives from a human resource (HR) and learning perspective connects to two of the seventeen SDGs (ibid.). The two SDGs are used as a framework for how this article characterizes and uses sustainability analytically. Firstly, SDG 4, "Ensure quality education and promote lifelong learning opportunities for all", refers to key topics and purposes for HRD and learning studies focusing on development and the sharing and application of knowledge and experiences in workplaces and on an organizational level, on a continuous basis. Focusing on lifelong learning underlines

the need to counter internal and external changes to provide equivalent opportunities for the continuous development of human skills and competencies through different learning formats (e.g., formal, non-formal and informal learning). Secondly, SDG 8, “Promote sustainable economic growth, full and productive employment and decent work for all”, is used as the second notion for how sustainability is construed in this descriptive review study. The importance of bringing organizational and workplace learning to the forefront associated with SDG 8 stems from the idea that success in volatile and dynamic environments, characterized by rapid and radical changes, requires people and organizations to address the need and capacity to continuously adapt and develop. Circumstances of rapid and radical external and internal changes have not diminished in the present times that in every aspect challenge organizations’ capacity to learn and adapt. For decades, the field of organizational and workplace learning has thus been focused on developing knowledge and learning models that can help explicate and manage learning and development, enhancing enterprises’ learning performance, well-being, healthy workplaces, and learning capacity, in a sustainably way.

Organizational and workplace learning has, from its establishment and the progress of theories and tools, aspired to support and bolster how work and HR practices are organized and function as relevant learning arenas for people and organizations. The impetus and underlying interest behind this article are that previous and current descriptions and analytical approaches, conceptualizations, and practices of sustainability in organizational and workplace learning studies seem ambiguous and immature. Most learning studies examine approaches to knowledge, competencies and experiences based on well-known and traditional themes and discourses, such as HR practices, management, learning and knowledge transfer, economic performance, and competitiveness.

In this article, the starting point is that the existing body of knowledge on what learning means in relation to the theoretical and practical transforming ecosystems framed by the sustainability agenda are dispersed and unclear. Even though the call for and interest in sustainability is wide-ranging and imperative, this uncertainty represents the key curiosity and impetus for the descriptive analysis that forms the basis of this contribution. Our principal line of argument is thus that we need explorations that can deepen our knowledge of how sustainability is approached in HR and learning studies [3–7].

Researchers within HR and learning studies emphasize that existing research-based knowledge of sustainability and organizational and workplace learning is diffuse and characterized by a discrepancy in approaches and common framing. We are inspired by the principal line of argument from Heizmann and Liu’s [8] contribution to sustainability and leadership learning that calls for more integrated research, and Anderson et al.’s [9] analysis of themes in the *Management Learning* journal during the 1994–2018 period, where only four articles address the topic of sustainability. In another important framing of sustainability in HR and learning studies, Scully-Russ [10] underlines the fact that the research and practice field of HRD needs to move beyond traditional task focus to integrate the theme of sustainable development into its understandings and operations, to better support its organization’s adaptation to today’s complex and dynamic business contexts. Furthermore, Scully-Russ [10] argues that we need more knowledge of perspectives and practices regarding how sustainability is associated and employed within organizational and workplace learning contexts.

Furthermore, Torraco and Lundgren [11] argue that HRD and learning research and practice must transform from more traditional HRD to working with, and developing, deep-seated solutions to change and sustainability within a learning and development context, moving beyond seeing these topics as a mere corporate social responsibility (CSR) issue. More generally, Zarestky and Collins [5] underscore the fact that HRD must address and support the construction of viable solutions to the sustainability goals formulated by the United Nations. We see the same theoretical and practical aspirations in a Special Issue on HR management [12], which deals with how HR can manage the transition to the integration of sustainable HR practices, with a special focus on how to conceptualize the

triple bottom line (TBL) dimensions, concluding that more knowledge is needed of how to achieve this, underlining the importance of OL and WPL studies.

The underlined uncertainty regarding the form and content of approaches to sustainability as associated with learning in organizations and workplaces highlights a narrative that underscores the fact that HR and learning professionals “struggle to understand what it [sustainability] means in practice for their organization” [3]. Likewise, Elkjaer [13] features the importance of making inquiries into the connotations of sustainability and learning in organizations an essential responsibility for HR, management, and learning research, in current times. Thus, although sustainability reflects a grand challenge for HR and organizations today, the way that researchers approach and analytically perceive sustainability in learning studies remains uncertain and tentative.

This article analyzes theoretical, empirical and practical perspectives on sustainability in studies of organizational and workplace learning, which represents a key current challenge for learning research and practice as argued and narrated in this introduction [14,15]. The purpose is to explore the main approaches and associations ascribed to sustainability and learning in organizations and workplaces, to guide future studies and explorations. We therefore ask, “From what perspectives has sustainability been approached in organizational and workplace learning studies, and how is sustainability associated with organizational and workplace learning?”.

In the following study, we present results from a thematic scoping review conducted in the OL, WPL and HR studies fields. Firstly, we outline the general approaches of how knowledge and experience processes have been understood and viewed in HR, OL and WPL studies. This outline functions as a backdrop for the presentation of results from the thematic scoping review. Secondly, we introduce the methodological starting point for the scoping review, including a description of selection criteria and analyses. Thirdly, to frame how OL and WPL have been understood and studied, we employ a thematic analysis to explore the perspectives that have been used in approaching sustainability in OL and WPL studies. Finally, we discuss the theoretical and practical implications of the analysis, and conclude that studies of learning in organizations and workplaces deal with sustainability in scattered and diverse ways that need a more integrated core understanding of approaches and associations. We address how practitioners and research can move forward with more integral understandings of sustainability in the fields of organizational and workplace learning.

## 2. Reflections on Sustainability in Organization and Workplace Learning Studies

Researchers from HR and learning studies and other related areas such as economics, management, sociology, and psychology have long argued for the significance of individual and organizational learning [16]. OL and WPL appear when organizations and people in workplaces undergo, and are confronted with, changes in the circumstances of how knowledge, competencies and experiences are built, shared, and applied in the organization or amongst individuals in the workplace [17–19].

In the research, OL and WPL are defined in different ways, with no consensus on a single characterization [16,18]. Studies that theorize typologies of learning in organizations demonstrate the existence of different philosophical views on the theoretical and practical phenomenon of learning in organizations and workplaces, such as functionalistic and practice-based views [15,20]. These views construct specific philosophical underpinnings for how to approach sustainability in organizational and workplace learning, for example, as a concrete entity that can be measured and managed as a structural facet or as an emergent feature that is socially constructed in practice.

A functionalist approach encompasses behavioral or cognitive learning processes through which it is hoped to, sometimes normatively, explain and change an individual, team or organization’s routines or theories-of-use regarding, for example, the realization of sustainability, thus showing how learning can be managed in a sustainable way. The theme of sustainability in a functionalistic approach is generally focused on explaining

and managing how organizations adapt to changes measured from economic performance outputs as a response to different types of learning input, e.g., from the implementation of new routines or procedures based on processing experiences and feedback. Measures – and success criteria – look at changes in, for instance, productivity, strategy realization, and/or effectiveness. Another dominant understanding of sustainability within a functionalistic approach is tied to how an organization manages to balance exploitative and explorative learning processes in organizations [21–23].

Argyris and Schön [24], also belonging to a functionalistic paradigm of learning in organizations and workplaces, do not talk openly about sustainability, yet, in their approach they underline the importance of developing organizational learning systems—model 1 and model 2—that are able to change humans’ guiding theories of actions, creating the foundation for more radical and deep-seated learning processes called double-loop learning. The model 1 theories of action that lead to the application of defensive theories of actions constitute barriers to model 2 theories of action, and prevent error detection and correction, but also more accommodating types of learning in organizations. A change in the theories of action which may lead to non-defensive ways of thinking and acting can only take place if individuals and organizations learn to think and act in ways marked by an open exchange of information and knowledge, which then (ideally) will lead to a model 2 learning system [25]. Sustainability is, within this approach, a matter of creating learning systems that can realize double loop learning processes, so that organizations and workplaces can go beyond mere detection and correction of errors and are able to create more deep-seated changes of the governing values and theories in use, which are needed to be able to cope with the grand challenges humans, organizations and workplaces, and societies, face today.

A different understanding of learning comes from a practice-based approach, which refers to learning that takes place through joint and shared practices in the organization, but still utilizing the tools of learning at the individual and social levels. A practice-based approach to practices of sustainability – and the changes thereof – constitute the focus for how to view this phenomenon as constructed and enacted in concrete interactions under specific social, cultural, and material conditions. These general theoretical framings of learning in organizations or workplaces thus shape this thematic scoping review’s descriptive and analytical potential, as most identified papers employ the above-mentioned functional approach in studies of OL and WPL and perspectives on sustainability within these studies.

WPL most often refers to learning by individuals and teams, the nature of learning, and its role in promoting employees’ knowledge, skills or competencies at work [26]. OL is often associated more broadly with the development of the entire organization through the processing of knowledge and experiences, such as routines or practices [17,27]. Examples of how learning is actualized in OL and WPL studies include deploying new organizational routines or personal competencies, developing actions and learning systems, or enacting practices and distributing knowledge in communities of practice. However, OL and WPL can also be a continuum: individual and group learning in the workplace is a prerequisite for enabling learning and development throughout the organization, and vice versa [28].

Another constituting distinction for framing learning in organizations and workplaces—and to elucidate in what ways the fields of HR and learning studies approach sustainability—is between a descriptive and analytical approach and a normative and practice-oriented approach [29,30]. Descriptive research is characterized by studies that have an interest in understanding and explaining the phenomenon of learning processes and outcomes in organizations and workplaces, thus developing existing theories and concepts. Sustainability in an OL and WPL context focuses on creating research-based knowledge, theoretical and empirical, of what characterizes processes and possible results dealing with sustainability. A normative approach, on the other hand, has a keen interest in how to plan and develop organizational and workplace-embedded routines and practices so that they become sustainable, for example, how to construct organizational development that is more viable

through time and space or how to develop a sustainable organization or workplace that includes more than just being economically oriented or “environmental”.

### 3. Methods

We designed and deployed a plan to assess the relevant literature based on the research question, “From what perspectives has sustainability been approached in OL and WPL studies?” Inspired by the structure illustrated and developed by Arksey and O’Malley [31], we organized a thematic scoping review. We decided to deploy a scoping review because we identified a knowledge gap regarding approaches to sustainability and learning; thus, mapping based on broader research questions and topics seemed to be the most coherent approach, compared with using a meta-systematic overly objective or narrative, mainly subjective review [31,32]. A scoping review is characterized by being descriptive, without a deeper theoretical synthesis of compared results as the research lays out the overall accounts for a phenomenon under study. It was judged that a descriptive mapping via a scoping review was best fitted for this type of inquiry, as more knowledge is needed.

We structured the search string and conceptual foundation for our search based on the concepts from the research question that would help construct the overall mapping and analysis by considering the terms OL, WPL and sustainability. We organized the data collection and review process by conducting searches in selected databases before reporting the results, and divided the searches into two groups, one focused mainly on OL and one focused on WPL.

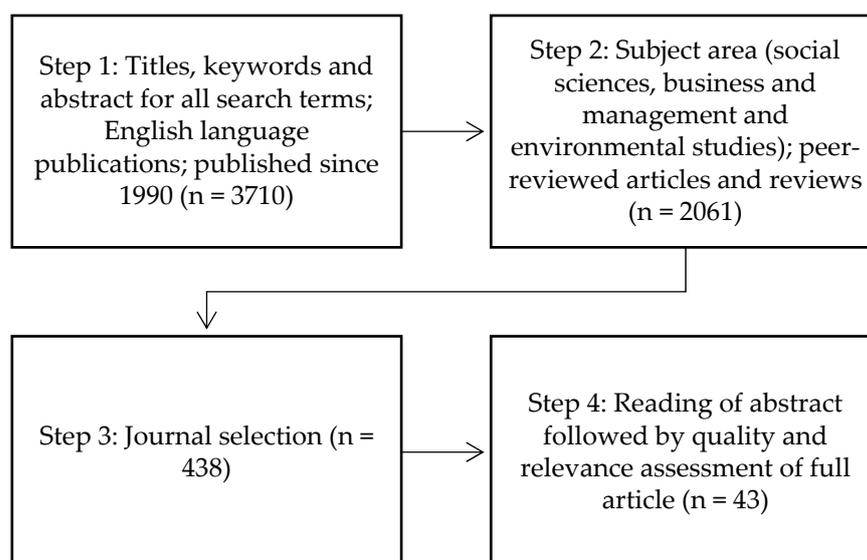
All search strings included “sustainability” as a key search word. Specifically, we deployed the search terms “sustainab\*” with “learning\*” and “organization\*” and “organizational learning” for the first group (pool 1) and “workplace” and “learning” and “workplace learning” and “sustainab\*” for the second group (pool 2). To broaden the coverage, we included material from the HR field. Since the emergence of HR research and WPL, the two fields have been closely related disciplines, especially regarding the skills and competence development dimensions [7]. Thus, we supplemented the search with the search terms “sustainab\*” and “learning” and “human resource”. We limited the search of articles to the following generally acknowledged databases for research covering OL and WPL studies: scopus.com, ERIC (only for the workplace learning search) and EBSCO.

#### 3.1. Eligibility Criteria

To identify core resources and relevant hits, we maintained the inquiry generally open, because the theme of sustainability is a new and, from an aggregate perspective, unfamiliar feature within WPL and OL research. We refined and focused our inquiry through four steps. In the first step, we employed “titles, keywords and abstract” and included only articles written in English. We also limited the data range to articles published from 1990 to the end of 2019, where we concluded our search. Regarding the year as a search criterion, we were inspired by other types of scoping reviews inquiring into views and approaches that included longer stretches of time [28,33]. It appeared from our searches that the 1990s represented the stretch where the first articles on sustainability and learning appeared within the respective fields under study, primarily viewing learning as a means to create competitive advantages that are sustainable [34,35]. In the first phase, we identified a high number of studies common to all three databases ( $n = 3710$ ), which called for the inclusion of additional screening criteria.

In the second step, we included only articles from the subject areas “business, management and accounting”, “social sciences”, and “environmental sciences”. In addition, we employed the filters “peer-reviewed articles” and “reviews” to refine the results. These two screening categories significantly reduced the number of identified articles ( $n = 2061$ ), even though the number of journals was too high for the subsequent review process. Inspired by Bapuji and Crossan [33], in the third step we employed selected journals as a screening filter, choosing leading journals within the field, resulting in 438 articles. We included acknowledged journals within WPL, OL and HR studies that also figured in the databases

used, for instance: Learning Organization, Sustainability, Human Resource Development International, Journal of Business Ethics, Journal of Knowledge Management, Organization and Environment, Organization Studies, Management Learning, Journal of Management Inquiry, Journal of Workplace Learning, Academy of Management Learning And Education, European Journal of Training and Development, Human Relations, Human Resource Development Review, Human Resource Management Review. Figure 1 shows the data collection, the employed criteria, and the selection process.



**Figure 1.** Data criteria overview for data collection.

### 3.2. Quality Assessment

After locating the pool of relevant articles in the three phases, the author group evaluated the article abstracts, to screen out less-relevant articles, representing a fourth step. The authors read and evaluated all abstracts, which resulted in 45 articles. Many of the abstracts and articles in the three databases appeared in both search string groups. In the next step, a deeper reading of the articles resulted in the screening of articles for those in which the purpose and included theories were not clearly related to WPL or OL and sustainability, resulting in 43 articles constituting the data for this review analysis. The 43 articles are marked with an asterisk in the reference list. The quality assessment was a mixture of recognized accuracy, relevance, and general coupling with the fields of OL and WPL. Firstly, we evaluated in what way the “scope” of the study correlated with the research question and interest, and thus whether the study dealt with sustainability and learning in organizations or workplaces as associated concepts or notions. Secondly, we used “source”, referring to articles on empirical or theoretical research related to sustainability and learning in organizations or workplaces. Thirdly, we employed context as an important assessment criterion; for example, studies that set out to examine sustainability researched in primary schools or vocational education were omitted, as well as studies that had a purely environmental agenda. Thus, the articles we analyzed dealt with OL and/or WPL associated with sustainability defined in a coherent way and made good use of the theory and definitions of core concepts, including strong supportive data and integrated methods and theoretical concepts.

### 3.3. Analytical Strategy

We used thematic analysis to uncover categories and themes relevant to the research question for the identified articles. The use of thematic qualitative analysis was inspired by the structure and ideas outlined and developed by Braun and Clarke [36] within qualitative method studies, and further employed by Brown et al. [37] for a scoping review. We started

the analysis by reading through all the articles, to compose an overview of the selected studies. Next, we used two questions as structuring devices to frame and organize the thematic analysis of the selected articles, to help answer the main research questions guiding our study: (1) How is sustainability approached? (2) How is sustainability associated with organizational and workplace learning? The articles were divided among three researchers, each of whom carefully concentrated on one-third of the articles and examined the keywords and descriptions that matched the questions. We created an analytical table in which we categorized the descriptions and keywords found in each article in terms of approaches to sustainability and the associations between sustainability and learning. In this way, we carried out the process of summarizing the data, which is an important phase of thematic analysis [36]. After the summarizing phase, we analyzed the descriptions and keywords compiled in the form of a table that presents the perspective of our research question. We interpreted the perspectives and similarities and differences between the keywords and descriptions found. Based on the data, we created four themes that were represented as recurrent themes in the data, each of which produced a different description from the perspectives of sustainability. After creating and naming the preliminary themes, we reviewed the material once again, to ensure that the descriptions and keywords found in the material aligned with the themes created. Based on this analysis, the names of the themes were developed.

Twenty-five (61%) of the articles used an empirical method and data, whereas 17 (39%) articles were theoretical studies, including discussion notes and reviews. The main type of empirical study was qualitative, single-, or multiple-case studies. Of the 25 empirical studies, 20 were qualitative case studies, including nine single-case and 11 multiple-case studies. Regarding the quantitative studies, three were based on survey data, and two were mixed-methods studies integrating various data. The three quantitative empirical studies were mainly observational. In terms of sector, the empirical qualitative case studies covered very varied types of enterprises, including private and public organizations, but most examined private companies. The three quantitative studies took place in a software firm and two environment-oriented firms, one public and one private. Many of the empirical studies were conducted in the Nordic countries, the United Kingdom, Australia, and the United States, while a few were conducted in South America and China, indicating the Western emphasis in representative locations. Of the 17 theoretical studies, 14 were purely theoretical, whereas two were reviews.

#### 4. Results

In this research, we explored the perspectives that have been used in approaching sustainability in OL and WPL studies. The analysis of the identified study shows that OL and WPL research has utilized four different perspectives on the approach to sustainability associated with learning: (1) balance perspective, (2) dimensional perspective, (3) integral perspective, and (4) outcome perspective. We present these perspectives in more detail below.

##### 4.1. Balance Perspective

The first perspective on the approach to sustainability in the OL and WPL articles emphasizes balance, indicated by the name of the theme, “balance perspective”. In articles, the balance perspective often originated in the Brundtland Commission’s ([38], p. 43) generally accepted portrayal of sustainability as a “development that meets the needs of the present without compromising the ability of future generations to meet their own needs”. In the articles, the use of sustainability denotes a general narrative that emphasizes the significance of a necessary equilibrium or balance between current exploitation and exploration of resources (broadly defined) and future resources, as a type of conventional win-win-win rationality in the field across time [3,39–41]. The time and equilibrium aspects function as a pivotal perspective for the meaning of sustainability in OL and WPL studies generally across the studies, signifying that learning and change, for instance, at the economical level needs a concurrent awareness of the social and ecological consequences.

For instance, according to this perspective, a sustainable competence development program in an enterprise must not look at the present benefit of an initiative but must integrate the long-term effects, as well as finding a balance between the resources used to develop and launch the program and the future use and distribution of resources and needs of the program.

The balance perspective also emerged in articles based on the notion of the triple bottom line (TBL), encompassing the three pillars of sustainability: the environment, the economy and society. Referring to Elkington's [42] important contribution to the possible win-win-win scenario from the right balance among the three pillars, almost all articles used the TBL as a necessity for characterizing sustainability [1,6,43–46]. The balance of the three features of TBL opens dynamics in the specific characterizations of sustainability within research on OL and WPL.

As an illustration of the use of the balance perspective of sustainability in OL and WPL studies, Benn and Martin ([47], p.397) define sustainability as "a holistic body of knowledge and understanding of practice that meets the needs of current and future generations". This denotes the fact that sustainability must not only embrace needs and resources over time, but also include universal knowledge and practices in each space to be termed sustainable, echoing the general understanding developed by Brundtland. In another example, Gallagher et al. [40] defined sustainability as a phenomenon that depends on "a balanced relationship of the triple bottom line – people, profit and planet" (p. 1). Thus, the authors scrutinized the balance among the three pillars reflecting the TBL conceptualization of sustainability, as well as the balance between present and future use of resources. Generally, across the identified studies we observed wide agreement regarding the definition of sustainability that follows the dimensions from the TBL argument, although the features were presented as contested trade-offs, which we examine in more depth in the following subsection.

#### 4.2. Dimensional Perspective

Although the balance perspective of sustainability was frequently identified in the articles, a more in-depth reading of the material revealed that the meaning of sustainability seems to be more dynamic, and contains different combinations and prioritizations, resulting in imbalances and tensional narratives of the meaning of sustainability. Based on the analysis, the second theme was called the "dimensional perspective," which describes the perspective of approaching sustainability through the social, environmental, economic, or human dimensions.

In 34 of 43 articles, the dimension of social sustainability was addressed as the main characterization; the environment and the economy were secondary. Outcomes of sustainable development in the social dimension were presented in different actualizations, for instance, CSR discourse [40,46,48,49], sustainable work practice and working life [44,50–53], sustainability practices [54], program sustainability [55–57] or sustainable HRD [58–61]. Fritz et al. [62] referred to the concept of human energy when talking about human and social sustainability at the individual level. The social dimensions of sustainability were generally referred to as the capacity to strengthen the organization's development and well-being through increasing personnel, managers', or stakeholders' knowledge of and autonomy to develop the individual, the organization, and the larger society towards sustainability. A primary outlook on the social dimension was the whole organization or smaller units' development within the organization. Regarding OL and WPL, sustainability defined by its social features and connections was the primary approach in the material, as the social dimension denoted interconnections between people in social, material, and cultural contexts, making it relevant for learning in all its instantiations.

In 10 articles, sustainability was explained as related to the classical notion of sustainability: the environmental dimension [57]. Although the environment has been the top item on the sustainability agenda since the beginning, it remains on the periphery within the literature, with a focus on learning to be "green" [63]. Articles referred to the natural

environmental dimension, encompassing urban [58], construction [64], ecosystem [65], agricultural [55] or ecological [66–69] sustainability features in organizations and workplaces. Environmental sustainability was intended to be actualized by changing employees' and organizations' awareness of constructing (learning) environmentally ecological and viable behaviors, routines and practices as an outcome [70]. Thus, sustainability was characterized as an outcome that attempts to balance economic and natural environmental sustainability.

However, it is in the relationship between the economic approach to sustainability and an ecological understanding that a potential tension emanates, regarding the meanings of sustainability in our data. On one hand, the relationship is, on the surface, characterized as having mutual value from an alignment of profit maximization and environmental focus. On the other hand, the relationship is narrated as tense and critical, in that the environment is mainly seen as a strategy and empty rhetoric for maximizing economic profit. As an illustration, Perey and Benn [68] examined organizing narratives that underpin the creation of ecological solutions in Australia's Landcare enterprises. The authors discovered two narratives, the dominant one focusing on ecological exploitation, managerial and profit-oriented, and an emergent narrative that argued for more active engagement with nature. Another illustration comes from Banerjee's [64] critical reply to an article underscoring the dilemma in the use of a "win-win" discourse regarding profit and the planet, employing knowledge and experiences from working with sustainability. These examples outline the underlying core intersection for the understanding of sustainability presented as extended between an approach that uses environmental sustainability as part of the business strategy and an approach that sees them as equal dimensions. Overall, the power play between the so-called holistic sustainability discourse and a managerial economic discourse indicates fundamental differences in the conceptualization of sustainability in learning studies [6,45].

In addition, in several articles, the environmental and social dimensions of sustainability were linked, whereas only two articles referred to a human dimension of sustainability. A human approach is explained as employees' energy management identified with well-being and a result of strategic individual and organizational learning [62] or "work that supports sustainable work ability by promoting development in employees' personal resources", as developed by Kira et al. [71]. In other example, Gallagher et al. [40] emphasized that the indirect effect of responsible organizational learning for developing employees' comfort and continuous learning (the people dimension) is missing in research and is an important feature for understanding what sustainability is. In sum, we found a more dominant outlook of the social and collectivist features and themes connected with organizational learning, whereas the human dimension was less developed as a concept.

#### *4.3. Integral Perspective*

In many of the articles, sustainability was approached from the perspective of learning itself, when it was defined as an integral part of learning, knowledge, or development. This meant that learning and sustainability were determined to be intertwined as "sustainable processes" or "sustainable creations" [51]. Learning was referred to as sustainable work and sustainable work abilities to develop and maintain individual competencies, well-being, and organizational development [44]. Arnesson and Albinsson's [43] concept of sustainable learning intertwining both concepts is related to the social dimension of sustainable development. The central issues in their conceptualization were learning and the capacity to benefit from knowledge and tools for developing preparedness for action and trusting one's own capacity for lifelong learning. Nevertheless, when sustainable developmental processes were emphasized, the role of learning seemed to be intermediary for sustainability.

The analysis showed that many identified articles approached sustainability as an integral part of learning, using concepts such as individual knowledge, ability, routines, values, attitudes, capacity, and skills needed to become a sustainable workplace or organization [49,50,53,59]. The dominant learning discourse within this framework focused on cognitive and behavioral processes and content targeted at changing employees' knowledge

and behavior. This discourse connects to a functionalistic approach to learning in workplaces and organizations following, for example, Popova-Nowak and Cseh's [15] framework and Elkjaer's [13] recent contribution on conceptualizations on learning in the organizational and workplace context. The extensive use of Crossan et al.'s [72] conceptual framework is an example of this kind of functionalistic approach [3,51]. Crossan et al. ([72], p. 522) defined organizational learning as the principal means of achieving strategic renewal, which is accomplished through a multilevel construct based on feed-forward and feedback processes founded on four subprocesses (intuiting, interpreting, integrating and institutionalizing) and three analytical levels (individual, group and organization).

The functionalistic approaches to learning were also used behind the practical inferences for how to become a sustainable learning organization as described by Waite, underlining the importance of leadership strategies as a means to foster sustainable development [73]. Furthermore, Crona and Parker [66] examined knowledge production and its use for sustainable development, whereas Zollo et al. [6] referred to employees' capacity building to become a sustainable organization. Jamali [49] investigated a company that had a built-in learning capacity as a whole system. *Sustainability-oriented learning* was also defined as a process where the organization displays behavioral changes in the knowledge and value base because of a reflexive process [74]. In some articles, learning theories emphasized functionalistic features, for example, the aims of changing people's behavior [67], sustainability-related knowledge and competencies, values, and even organizational culture with the help of procedures such as education, training and longer-lasting programs.

Contrary to the functionalistic approaches, articles approached sustainability as an integral part of social and practice-based learning. In these articles, OL and WPL were described as social learning practices that occur in teams and units of organizations during everyday activities [39,47,52]. Action learning, transformative learning, communities of practice and dialogical learning were utilized or referred to most often. Learning as social and practice based was appreciated as an important way of forming sustainable learning processes in organizations, but how this kind of learning would exactly occur was not usually clarified [70].

An example of a practice-based approach emerged in Benn and Martin's [47] article, in which they defined learning as shared practices to disseminate knowledge of sustainable development in the business school context. Ideas of transformative learning derived from Mezirow were also widely utilized [39,55,75]. In one article, learning was not defined, but referred to as sustainability competence that could be developed from dialogic interaction [1]. Sustainable learning also emerges as knowledge transfer that takes place socially at the individual and organizational levels [68]. Learning and change are anchored in practice, the process of examining and questioning, and power relations are integral to learning processes, accentuating the feature of sustainability [39]. The practice-based and social learning approach emphasizes that learning is strengthened in situated practices and organizational networks, being not only a cognitive or individual endeavor [48,54].

#### 4.4. Outcome Perspective

The last identified theme was called the "outcome perspective." It describes an approach in which sustainability is seen primarily as the result of a learning process or activity. Our analysis revealed that learning was frequently outlined as a tool or means necessary for creating sustainability as a learning outcome. Utilizing a tool metaphor, learning was approached as creating the grounds for sustainable development at the (1) individual [33,62] and (2) organizational and system levels [76].

At the individual level, conceptualizing learning was a matter of creating sustainable behavior, knowledge, or routines, often through well-known HR practices such as recruitment, formal training, and knowledge acquisition. Learning embedded organizationally or through the workplace was outlined as the vehicle for actualizing this aspiration, which represents a traditional input-output model thinking [74,77–80]. Learning functions as a tool or device, an input, to reach sustainability or sustainable development for organiza-

tions representing the goal or output in the learning–performance association [3] and its people [40].

Learning as a tool for reaching or learning about sustainability occurs mostly with the help of different kinds of interventions, such as formal education, training and courses offered by the employer as part of an HR practice system [66,67,81]. In relation to WPL, various HRD practices, developmental programs and training were introduced to achieve this aim [50,60,75]. Learning, or training, as this is usually labelled, is approached as an effective tool, for instance, in terms of management and leadership development, and described as the capacity to leverage knowledge and talent for the creation of a sustainable mindset or action program [48,50]. Learning was also strongly seen as a tool supported by HR practices, for instance, occurring in and through learning programs, that enhance and support the learning itself. In Gallagher et al.’s ([40], p. 774) article, the “missing P of people” was mentioned, emphasizing the importance of work–life balance to improve employee health and well-being. Generally, how learning relates to sustainability, or how different practices would support sustainable development [41,56], was not clearly outlined. Rather, the focus was on different requirements and frames [45] of learning or learning as an unframed [77] or described and taken-for-granted outcome.

At the organizational level, conceptualizations represented the structural, managerial, or cultural dimensions needed to become (or learn to become) a sustainable organization [47,78]. For instance, the association between OL and sustainability was explored as creating a “sustainable learning culture” [77] or learning culture [76] that all organizational members, not only managers and leaders [75], should be committed to achieving [41]. A systemic perspective [76] was considered in terms of structural and cultural features supporting sustainable development in organizations, as well as approaching sustainability as practices that are complex and networked among individuals across units, teams and members from the same organization or outside.

## 5. Discussion

The analysis of this study shows that organizational and workplace learning research has utilized four different perspectives in approaching sustainability associated with learning: (1) balance perspective, (2) dimensional perspective, (3) integral perspective, and (4) outcome perspective. These four perspectives are partly overlapping, but they can provide a general starting point for looking further at these associations. In Figure 2, we outline the results from our exploration into perspectives of sustainability in OL and WPL studies.

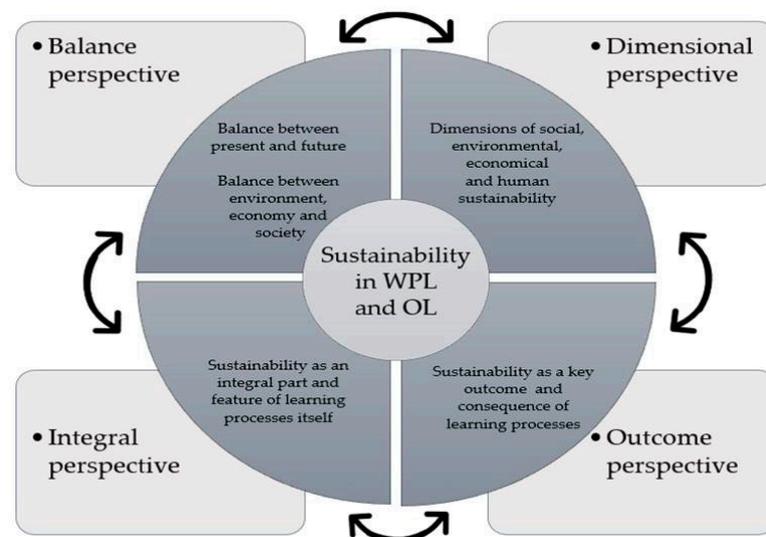


Figure 2. Perspectives of sustainability in OL and WPL studies.

Our findings suggest that the sustainability in OL and WPL research is heavily influenced by normative statements. For example, many researchers were interested in the elements needed to become a sustainable organization, emphasizing the outcome perspective in our findings. However, analytical studies into what is theoretically or empirically meant by sustainability were uncertain and tentative, the concepts of OL and WPL were poorly defined, and sustainability as an integral part of them was taken for granted. Often, a value-laden stance was taken towards sustainability as positive and necessary for survival or success. Likewise, sustainable learning or sustainability of/in learning was not clearly characterized, except the general position related to the balance perspective firmly grounded in the Brundtland Commission's definition. The focus on sustainable (acting) individuals or organizations oriented towards the economic, environmental, or social dimensions, needed deeper theoretical inquiry into the dimensions of human sustainability. For example, the United Nations [82] (2021) SDG number 8, "Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all", focuses on the dimensions of human and social sustainability, for example, well-being, decent work, and job quality, which are important parts of our conceptualization of sustainability and OL and WPL. Our findings also showed that the idea of sustainability in research contexts in general, and relating to social and human dimensions particularly, does not seem to be missing outside Western countries.

One important question emerging from our review is the question of how to become an organization that has the capacity for continuous learning and change as an important illustration of sustainable development. OL and WPL should be seen as contextualized and situated [7,83–85], and, due to the context-specific nature of sustainability in WPL and OL, achieving sustainable development should not be idealistic and "one model fits everywhere and everyone". We need to think about and specify what different stakeholders on all levels mean when they talk about sustainability or sustainable development and learning in their organizations and workplaces, as, for example, Elkjaer ([13], p. 17) argues, mirroring the connectivity problem of OL research and practice.

The practical implications of this study for HRD and competence development are related to the critical notion of approaching OL and WPL mainly as tools for achieving sustainability or sustainable development (referring to environmental sustainability) in organizations. Consequently, we found an obvious shortcoming in approaching sustainability from social and human perspectives and the attempt to define the sustainability of learning itself, although we omitted studies based on formal organized learning types (e.g., training and courses). Therefore, information provided by this study can be used to make practical proposals for organizational structures, practices and activities that promote sustainable OL and WPL, thus increasing people's resilience and ability to cope with and at work, as well as reducing the threats to well-being [86] caused by, for instance, learning and developmental load [7,87]. The focus of sustainable OL and WPL in organizations should be on the outcomes and processes of learning, which are assessed from the perspective not only of the individual but also of the communities, society, and decency of work in the future [88].

Learning plays an increasingly important role in the daily activities of organizations and workplaces; thus, HRD and competence development is no longer just a matter of personnel training and education administration, as our findings suggest, but a holistic set of integrating people management and organizational practices. Thus, sustainable learning associated with and realized through OL and WPL activities extends increasingly to the work of, for example, supervisors and managers, and to the core of organizational structures, processes, and operations [14,89]. Bierema [90] underlines, in the wake of the COVID-19 pandemic, the importance of the professions of human resource management (HRM) and HRD integrating sustainability as part of their core competencies and main task, which means revitalizing a focus on discretionary and conducive learning environments, competence development, and social and ethical accountability. Therefore, perspectives of sustainability within learning studies should also be considered comprehensively, con-

sidering the evolution of HRD practices, new learning formats and responsibilities in organizations and workplaces.

Based on the four perspectives found, we argue that it is important for learning research to study the connection between human well-being and learning in workplaces and organizations. It has been suggested [10,91,92] that when organizations search for environmentally and economically sustainable solutions, they should first better understand aspects of human and social sustainability. Sustainability in OL and WPL studies are concerned with how to explain and understand change as a learning process that takes place at all levels in the organization, from the individual and team to the intra-organizational and inter-organizational levels, as pointed out by Docherty, Kira, and Shani [87]. In addition, sustainable development is about creating multidimensional frameworks and more inclusive models of sustainability and learning in the respective research fields.

Our findings offer a multifaceted picture of how sustainability is approached and associated with the learning that takes place in workplaces and organizations. However, the perspectives revealed, for instance, which aim to find a balance between the dimensions of sustainability and integrate learning and sustainability to reach the desired outcome, give only a general picture of these associations. This general picture calls for a stronger interconnectedness of sustainability and learning with the environments and contexts (organizational, national, or global) in which it exists. Consequently, future research on sustainability and OL and WPL requires new methodological tools and empirical case studies (in-depth and practice-based studies, opening new input, theory building and critical insights) that would enable a wide and profound description and understanding of the interconnections between individual actors and the surrounding community and contexts in a multilevel manner. We were also puzzled by the almost complete absence of power and politics topics in the studies, for example, an analysis of the difference between the normative rhetoric versus “real” occurrences of sustainability practices in organizations and workplaces. In addition, tensional descriptions tied to ethical implications of sustainability aspirations in enterprises were missing. Thus, more critical scrutiny of well-known themes of power and politics, as well as ethically oriented studies of actualizations of sustainability, would open the normative bottle of notions and ideas of how sustainability is created.

## 6. Conclusions

This article studies the approaches to sustainability and learning in organizations and workplaces, and the associations between them. It is argued that sustainability represents a current articulated grand challenge for theory building in learning studies and practice, for instance, in human resources and competence development, that calls for integrated inquiries. However, we show that studies of learning in organizations and workplaces deal with sustainability in scattered and diverse ways that call for more integrated and analytical explorations of the different approaches and associations. This article thus explores the perspectives that have been used in approaching sustainability in OL and WPL studies. The analysis of the identified studies shows that OL and WPL research has utilized four different perspectives on the approach to sustainability associated with learning: (1) balance perspective, (2) dimensional perspective, (3) integral perspective, and (4) outcome perspective.

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## References

1. Wals, A.E.J.; Schwarzin, L. Fostering organizational sustainability through dialogical interaction. *Learn. Organ.* **2012**, *19*, 11–27. [[CrossRef](#)]
2. United Nations. About the Sustainable Development Goals. Available online: <https://www.un.org/sustainabledevelopment/sustainable-development-goals/> (accessed on 7 July 2020).
3. Benn, S.; Edwards, M.; Angus-Leppan, T. Organizational Learning and the Sustainability Community of Practice: The Role of Boundary Objects. *Organ. Environ.* **2013**, *26*, 184–202. [[CrossRef](#)]
4. Fenwick, T. Developing organizational practices of ecological sustainability: A learning perspective. *Leadersh. Organ. Dev. J.* **2007**, *28*, 632–645. [[CrossRef](#)]
5. Zarestky, J.; Collins, J.C. Supporting the United Nations' 2030 sustainable development goals: A call for international HRD action. *Hum. Resour. Dev. Int.* **2017**, *20*, 371–381. [[CrossRef](#)]
6. Zollo, M.; Cennamo, C.; Neumann, K. Beyond what and why: Understanding organizational evolution towards sustainable enterprise models. *Organ. Environ.* **2013**, *26*, 241–259. [[CrossRef](#)]
7. Lemmetty, S.; Collin, K. Throwaway knowledge, useful skills or a source for wellbeing? Outlining sustainability of workplace learning situations. *Int. J. Lifelong Educ.* **2020**, *39*, 478–494. [[CrossRef](#)]
8. Heizmann, H.; Liu, H. Becoming green, becoming leaders: Identity narratives in sustainability leadership development. *Manag. Learn.* **2018**, *49*, 40–58. [[CrossRef](#)]
9. Anderson, L.; Thorpe, R.; Coleman, C. Reviewing Management Learning: The field and the journal. *Manag. Learn.* **2020**, *51*, 17–34. [[CrossRef](#)]
10. Scully-Russ, E. Human resource development and sustainability: Beyond sustainable organizations. *Hum. Resour. Dev. Int.* **2012**, *15*, 399–415. [[CrossRef](#)]
11. Torraco, R.J.; Lundgren, H. What HRD is doing—What HRD should be doing: The case for transforming HRD. *Hum. Resour. Dev. Rev.* **2020**, *19*, 39–65. [[CrossRef](#)]
12. Westerman, J.W.; Rao, M.B.; Vanka, S.; Gupta, M. Sustainable human resource management and the triple bottom line: Multi-stakeholder strategies, concepts, and engagement. *Hum. Resour. Dev. Rev.* **2020**, *30*, 1–4. [[CrossRef](#)]
13. Elkjaer, B. Taking stock of “Organizational Learning”: Looking back and moving forward. *Manag. Learn.* **2021**, *53*, 582–604. [[CrossRef](#)]
14. Brandi, U.; Thomassen, M.L. Sustainable organizational learning and corporate entrepreneurship: A conceptual model of sustainability practices in organizations. *J. Workplace Learn.* **2021**, *33*, 212–228. [[CrossRef](#)]
15. Popova-Nowak, I.V.; Cseh, M. The Meaning of Organizational Learning: A Meta-Paradigm Perspective. *Hum. Resour. Dev. Rev.* **2015**, *14*, 299–331. [[CrossRef](#)]
16. Easterby-Smith, M.; Lyles, M.A. *The Evolving Field of Organizational Learning and Knowledge Management*; John Wiley & Sons: West Sussex, UK, 2011.
17. Brandi, U.; Elkjaer, B. Organisational learning viewed from a social learning perspective. In *Handbook of Organizational Learning and Knowledge Management*; Easterby-Smith, M., Lyles, M.A., Eds.; John Wiley & Sons: West Sussex, UK, 2011.
18. Alerasoul, S.A.; Afeltra, G.; Hakala, H.; Minelli, E.; Strozzi, F. Organisational learning, learning organisation, and learning orientation: An integrative review and framework. *Hum. Resour. Manag. Rev.* **2022**, *32*, 100854. [[CrossRef](#)]
19. Elkjaer, B.; Lotz, M.M.; Nickelsen, N.C.M. *Current Practices in Workplace and Organizational Learning: Revisiting the Classics and Advancing Knowledge*; Springer: Berlin/Heidelberg, Germany, 2021.
20. Cuel, R. A journey of learning organization in social science: Interview with Silvia Gherardi. *Learn. Organ.* **2020**, *27*, 455–461. [[CrossRef](#)]
21. March, J.G. Exploration and Exploitation in Organizational Learning. *Organ. Sci.* **1991**, *2*, 71–87. [[CrossRef](#)]
22. Prieto, I.M.; Pilar Pérez Santana, M. Building ambidexterity: The role of human resource practices in the performance of firms from Spain. *Hum. Resour. Manag.* **2012**, *51*, 189–211. [[CrossRef](#)]
23. Kang, S.C.; Snell, S.A. Intellectual capital architectures and ambidextrous learning: A framework for human resource management. *J. Manag. Stud.* **2009**, *46*, 65–92. [[CrossRef](#)]
24. Argyris, C.; Schön, D. *Organizational Learning II: Theory, Method, and Practice*; Addison Wesley: Reading, MA, USA, 1996.
25. Argyris, C. A life full of learning. *Organ. Stud.* **2003**, *24*, 1178–1192. [[CrossRef](#)]
26. Lundgren, H.; Bang, A.; Justice, S.B.; Marsick, V.J.; Poell, R.F.; Yorks, L.; Clark, M.; Sung, S.Y. Conceptualizing reflection in experience-based workplace learning. *Hum. Resour. Dev. Int.* **2017**, *20*, 305–326. [[CrossRef](#)]
27. Argote, L.; Miron-Spektor, E. Organizational learning: From experience to knowledge. *Organ. Sci.* **2011**, *22*, 1123–1137. [[CrossRef](#)]
28. Jeong, S.; Han, S.J.; Lee, J.; Sunalai, S.; Yoon, S.W. Integrative Literature Review on Informal Learning: Antecedents, Conceptualizations, and Future Directions. *Hum. Resour. Dev. Rev.* **2018**, *17*, 128–152. [[CrossRef](#)]
29. Tsang, E.W. Organizational learning and the learning organization: A dichotomy between descriptive and prescriptive research. *Hum. Relat.* **1997**, *50*, 73–89. [[CrossRef](#)]
30. Örtenblad, A. What does “learning organization” mean? *Learn. Organ.* **2018**, *25*, 150–158. [[CrossRef](#)]

31. Arksey, H.; O'Malley, L. Scoping studies: Towards a methodological framework. *Int. J. Soc. Res. Methodol.* **2005**, *8*, 19–32. [[CrossRef](#)]
32. Wang, J. Demystifying Literature Reviews: What I Have Learned From an Expert? *Hum. Resour. Dev. Rev.* **2019**, *18*, 3–15. [[CrossRef](#)]
33. Bapuji, H.; Crossan, M. From questions to answers: Reviewing organizational learning research. *Manag. Learn.* **2004**, *35*, 397–417. [[CrossRef](#)]
34. Bierly, P.E.; Hämäläinen, T. Organizational learning and strategy. *Scand. J. Manag.* **1995**, *11*, 209–224. [[CrossRef](#)]
35. Morrison, M.; Rosenthal, A. Exploring learning organizations: Enacting mental models—The power of the Rosenthal stage. *J. Workplace Learn.* **1997**, *9*, 124–129. [[CrossRef](#)]
36. Braun, V.; Clarke, V. Using thematic analysis in psychology. *Qual. Res. Psychol.* **2006**, *3*, 77–101. [[CrossRef](#)]
37. Brown, T.C.; O'Kane, P.; Mazumdar, B.; McCracken, M. Performance Management: A Scoping Review of the Literature and an Agenda for Future Research. *Hum. Resour. Dev. Rev.* **2018**, *18*, 47–82. [[CrossRef](#)]
38. Commission, B. *Our common future: Report of the World Commission on Environment and Development*; Oxford University Press: Oxford, UK, 1987.
39. Boström, M.; Andersson, E.; Berg, M.; Gustafsson, K.; Gustavsson, E.; Hysing, E.; Lidskog, R.; Löfmarck, E.; Ojala, M.; Olsson, J. Conditions for transformative learning for sustainable development: A theoretical review and approach. *Sustainability* **2018**, *10*, 4479. [[CrossRef](#)]
40. Gallagher, V.C.; Hrivnak, M.W.; Valcea, S.; Mahoney, C.B.; LaWong, D. A comprehensive three-dimensional sustainability measure: The 'missing P' of 'people'—a vital stakeholder in sustainable development. *Corp. Soc. Responsib. Environ. Manag.* **2018**, *25*, 772–787. [[CrossRef](#)]
41. Hawkins, B.; Pye, A.; Correia, F. Boundary objects, power, and learning: The matter of developing sustainable practice in organizations. *Manag. Learn.* **2017**, *48*, 292–310. [[CrossRef](#)]
42. Elkington, J. Towards the sustainable corporation: Win-win-win business strategies for sustainable development. *Calif. Manag. Rev.* **1994**, *36*, 90–100. [[CrossRef](#)]
43. Arnesson, K.; Albinsson, G. Reflecting talks: A pedagogical model in the learning organization. *Reflective Pract.* **2019**, *20*, 437–452. [[CrossRef](#)]
44. Kira, M.; van Eijnatten, F.M. Socially sustainable work organizations: Conceptual contributions and worldviews. *Syst. Res. Behav. Sci.* **2011**, *28*, 418–421. [[CrossRef](#)]
45. Müller, M.; Siebenhüner, B. Policy instruments for sustainability-oriented organizational learning. *Bus. Strategy Environ.* **2007**, *16*, 232–245. [[CrossRef](#)]
46. Smith, P.A.; Sharicz, C. The shift needed for sustainability. *Learn. Organ. Int. J.* **2011**, *18*, 73–86. [[CrossRef](#)]
47. Bann, S.; Martin, A. Learning and change for sustainability reconsidered: A role for boundary objects. *Acad. Manag. Learn. Educ.* **2010**, *9*, 397–412.
48. Fenwick, T.; Bierema, L. Corporate social responsibility: Issues for human resource development professionals. *Int. J. Train. Dev.* **2008**, *12*, 24–35. [[CrossRef](#)]
49. Jamali, D. Insights into triple bottom line integration from a learning organization perspective. *Bus. Process Manag. J.* **2006**, *12*, 809–821. [[CrossRef](#)]
50. Bratton, A. The role of talent development in environmentally sustainable hospitality. *Worldw. Hosp. Tour.* **2018**, *10*, 69–85. [[CrossRef](#)]
51. Kira, M.; Frieling, E. Bureaucratic boundaries for collective learning in industrial work. *J. Workplace Learn.* **2007**, *19*, 296–310. [[CrossRef](#)]
52. Silva, M.E.; Figueiredo, M.D. Practicing sustainability for responsible business in supply chains. *J. Clean. Prod.* **2020**, *251*, 119621. [[CrossRef](#)]
53. Waite, E.; Evans, K.; Kersh, N. The challenge of establishing sustainable workplace 'Skills for Life' provision in the UK: Organisational 'strategies' and individual 'tactics'. *J. Educ. Work* **2014**, *27*, 199–219. [[CrossRef](#)]
54. Reddy, S.M.; Torphy, K.; Liu, Y.; Chen, T.; Masuda, Y.J.; Fisher, J.R.; Galey, S.; Burford, K.; Frank, K.A.; Montambault, J.R. How different forms of social capital created through project team assignments influence employee adoption of sustainability practices. *Organ. Environ.* **2019**, *34*, 43–73. [[CrossRef](#)]
55. Moyer, J.M.; Sinclair, A.J. Stoking the dialogue on the domains of transformative learning theory: Insights from research with faith-based organizations in Kenya. *Adult Educ. Q.* **2016**, *66*, 39–56. [[CrossRef](#)]
56. Pluye, P.; Potvin, L.; Denis, J.-L. Making public health programs last: Conceptualizing sustainability. *Eval. Program Plan.* **2004**, *27*, 121–133. [[CrossRef](#)]
57. Upstill-Goddard, J.; Glass, J.; Dainty, A.; Nicholson, I. Implementing sustainability in small and medium-sized construction firms. *Eng. Constr. Archit. Manag.* **2016**, *23*, 407–427. [[CrossRef](#)]
58. Benton-Short, L.; Cseh, M. Changing Cities, Changing Culture. *Adv. Dev. Hum. Resour.* **2015**, *17*, 460–472. [[CrossRef](#)]
59. Kola-Olusanya, A. Embedding environmental sustainability competencies in human capital training and development. *Mediterr. J. Soc. Sci.* **2013**, *4*, 65. [[CrossRef](#)]

60. Valentin, C. Greening HRD: Conceptualizing the triple bottom line for HRD practice, teaching, and research. *Adv. Dev. Hum. Resour.* **2015**, *17*, 426–441. [[CrossRef](#)]
61. Wedchayanon, N.; Chorkaew, S. The sufficiency economy and people-centered development. *Eur. J. Train. Dev.* **2014**, *38*, 822–844. [[CrossRef](#)]
62. Fritz, C.; Lam, C.F.; Spreitzer, G.M. It's the little things that matter: An examination of knowledge workers' energy management. *Acad. Manag. Perspect.* **2011**, *25*, 28–39.
63. Ergene, S.; Banerjee, S.B.; Hoffman, A. (Un) Sustainability and Organization Studies: Towards a Radical Engagement. *Organ. Stud.* **2020**, *42*, 1319–1335. [[CrossRef](#)]
64. Banerjee, S.B. Embedding sustainability across the organization: A critical perspective. *Acad. Manag. Learn. Educ.* **2011**, *10*, 719–731. [[CrossRef](#)]
65. Manring, S.L. Creating and managing interorganizational learning networks to achieve sustainable ecosystem management. *Organ. Environ.* **2007**, *20*, 325–346. [[CrossRef](#)]
66. Crona, B.I.; Parker, J.N. Learning in support of governance: Theories, methods, and a framework to assess how bridging organizations contribute to adaptive resource governance. *Ecol. Soc.* **2012**, *17*, 32. [[CrossRef](#)]
67. Espinosa, A.; Porter, T. Sustainability, complexity and learning: Insights from complex systems approaches. *Learn. Organ.* **2011**, *18*, 54–72. [[CrossRef](#)]
68. Perey, R.; Benn, S. Organising for ecological repair: Reconstructing land management practice. *Organ. Environ.* **2015**, *28*, 458–477. [[CrossRef](#)]
69. Wals, A.E.J. Learning our way to sustainability. *J. Educ. Sustain. Dev.* **2011**, *5*, 177–186. [[CrossRef](#)]
70. Chia, R. A process-philosophical understanding of organizational learning as “wayfinding”: Process, practices and sensitivity to environmental affordances. *Learn. Organ.* **2017**, *24*, 107–118. [[CrossRef](#)]
71. Kira, M.; van Eijnatten, F.M.; Balkin, D.B. Crafting sustainable work: Development of personal resources. *J. Organ. Change Manag.* **2010**, *23*, 616–632. [[CrossRef](#)]
72. Crossan, M.M.; Lane, H.W.; White, R.E. An organizational learning framework: From intuition to institution. *Acad. Manag. Rev.* **1999**, *24*, 522–537. [[CrossRef](#)]
73. Waite, A.M. Leadership's influence on innovation and sustainability: A review of the literature and implications for HRD. *Eur. J. Train. Dev.* **2014**, *38*, 15–39. [[CrossRef](#)]
74. Siebenhüner, B.; Arnold, M. Organizational learning to manage sustainable development. *Bus. Strategy Environ.* **2007**, *16*, 339–353. [[CrossRef](#)]
75. Davis, K.; Boulet, M. Transformations? Skilled change agents influencing organisational sustainability culture. *Aust. J. Environ. Educ.* **2016**, *32*, 109. [[CrossRef](#)]
76. Senge, P.M.; Lichtenstein, B.B.; Kaeufer, K.; Bradbury, H.; Carroll, J.S. Collaborating for systemic change. *MIT Sloan Manag. Rev.* **2007**, *48*, 44.
77. de Paiva Duarte, F. Sustainability learning challenges in a Brazilian government organization. *Int. J. Organ. Anal.* **2017**, *25*, 562–576. [[CrossRef](#)]
78. Haugh, H.M.; Talwar, A. How Do Corporations Embed Sustainability Across the Organization? *Acad. Manag. Learn. Educ.* **2010**, *9*, 384–396. [[CrossRef](#)]
79. Mitleton-Kelly, E. A complexity theory approach to sustainability: A longitudinal study in two London NHS hospitals. *Learn. Organ.* **2011**, *18*, 45–53. [[CrossRef](#)]
80. Prugsamatz, R. Factors that influence organization learning sustainability in non-profit organizations. *Learn. Organ.* **2010**, *17*, 243–267. [[CrossRef](#)]
81. Edwards, M.G. An integrative metatheory for organisational learning and sustainability in turbulent times. *Learn. Organ.* **2009**, *16*, 189–207. [[CrossRef](#)]
82. United Nations. Promote Sustained, Inclusive and Sustainable Economic Growth, Full and Productive Employment and Decent Work for All. Available online: <https://sdgs.un.org/goals/goal8> (accessed on 6 December 2021).
83. Collin, K. Connecting work and learning: Design engineers' learning at work. *J. Workplace Learn.* **2006**, *18*, 403–413. [[CrossRef](#)]
84. Brandi, U.; Iannone, R.L. Approaches to learning in the context of work–workplace learning and human resources. *J. Workplace Learn.* **2021**, *33*, 317–333. [[CrossRef](#)]
85. Corradi, G.; Gherardi, S.; Verzelloni, L. Through the practice lens: Where is the bandwagon of practice-based studies heading? *Manag. Learn.* **2010**, *41*, 265–283. [[CrossRef](#)]
86. Manuti, A.; Giancaspro, M.L. People make the difference: An explorative study on the relationship between organizational practices, employees' resources, and organizational behavior enhancing the psychology of sustainability and sustainable development. *Sustainability* **2019**, *11*, 1499. [[CrossRef](#)]
87. Docherty, P.; Kira, M.; Shani, A.B.R. Organizational development for social sustainability in work systems. In *Research in Organizational Change and Development*; Emerald Group Publishing Limited: Bingley, UK, 2009.
88. Conigliaro, P. Between Social Sustainability and Subjective Well-being: The Role of Decent Work. *Soc. Indic. Res.* **2021**, *157*, 139–174. [[CrossRef](#)]
89. Bredin, K.; Söderlund, J. The HR quadriad: A framework for the analysis of HRM in project-based organizations. *Int. J. Hum. Resour. Manag.* **2011**, *22*, 2202–2221. [[CrossRef](#)]

- 
90. Bierema, L.L. HRD research and practice after ‘The Great COVID-19 Pause’: The time is now for bold, critical, research. *Hum. Resour. Dev. Int.* **2020**, *23*, 347–360. [[CrossRef](#)]
  91. Docherty, P.; Forslin, J.; Shani, A.B. *Creating Sustainable Work Systems: Emerging Perspectives and Practice*; Psychology Press: London, UK, 2002.
  92. Pfeffer, J. Building sustainable organizations: The human factor. *Acad. Manag. Perspect.* **2010**, *24*, 34–45.