



# Operationalising employee capabilities post pandemic crisis: a sustainable HR approach

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## Abstract

Sustainability scholars argue that sustainable human resource management (HRM) promotes positive financial, social, and human capital outcomes. Sustainability linked with people management creates an enduring business. However, many challenges exist for firms implementing and maintaining a sustainable HRM program. Evidence suggests that these challenges could intensify in economic uncertainty, and firms' sustainable HRM endeavours will likely be abruptly terminated in an uncertain environment. This article explores the adverse outcomes of economic uncertainty and the potential value of a sustainable HRM approach. A model drawing on the Resource-Based View and utilizing Dynamic Capabilities and Absorptive Capacity highlights how the practitioner can operationalize a sustainable approach to HRM in times of uncertainty.

**Keywords** Sustainability HRM · Uncertainty · Capabilities · Absorptive Capacity

**JEL Classification** J24

*“The measure of intelligence is the ability to change”  
Albert Einstein*

## 1 Introduction

Sustainable human resource management (HRM) has evolved rapidly over the past decade, intending to promote environmental integrity, social equity and economic prosperity, referred to as the *triple bottom line* (Lopez-Cabrales and Valle-Cabrera 2020). There is mounting evidence that sustainable HRM should become a key

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priority for all organizations (Aust et al. 2019; Kramar 2022; Ren et al. 2023). However, there are many challenges for the firm implementing and operationalizing a sustainable HRM program (Mariappanadar and Hochwarter 2022; Ehnert et al. 2016; Paulet 2019; Tooranloo et al. 2017), and recent evidence suggests that these challenges intensify during in periods of uncertainty (Malik and Sanders 2021; Kramar 2022; Sorribes et al. 2021; Stahl et al. 2020).

A crisis and the implications of ensuing uncertainty invariably typically cause firms to reconfigure their HRM approaches to maximize revenue and profit, while neglecting employee outcomes (Maley 2019). Thus, a crisis has an increased potential to create a paradox between sustainability performance outcomes—economic, social and environmental, generating conflicting sustainability objectives such as economic targets and social well-being aims (Hahn et al. 2018; Kramar 2014). Understanding what happens to sustainable HRM in uncertainty is extremely important as both the organization and the employee are vulnerable to the strategies taken to survive an uncertain environment (Wilkinson and Wood 2017). The Covid-19 pandemic 2020–2022, is a case in point, where all types of organizations faced uncertainty and major disruptions in the contexts in which they operate (Bouncken et al. 2022; Ererdi et al. 2022; Heath et al. 2022; Kramar 2021). Many organizations felt compelled to make hurried and significant deviations to their business strategies, particularly their HRM approaches. In hindsight, many commentators have reflected on the wisdom of the unprecedented global redundancies and abrupt cessation of all types of employee development (Azizi et al. 2021; Heath et al. 2022; Manuti et al. 2020), and the outcomes of these decisions are presently still under scrutiny.

This paper addresses a substantial evidence gap concerning the role of sustainable HRM in crisis and ensuing uncertainty—paying particular attention the aftermath of COVID-19 pandemic. The study addresses the challenging problem of how Sustainable HRM can best be operationalized during uncertainty by exploring the research question: ‘*What role could sustainable HRM play during periods of economic uncertainty?*’ This question is important to theory and practice. This conceptual study’s essential contribution to theory is that it presents an original causal framework to highlight the important role of sustainability HRM in uncertainty. The study draws on Barney’s (2001) resource-based view (RBV), incorporating Dynamic Capability (Teece 2007), and Absorptive Capacity (Cohen and Levinthal 1990) to enable individual capability development in uncertainty. The contribution to practice is long overdue; the model explains how sustainable HRM can actually be more effectively operationalized in the workplace post COVID-19 pandemic. In doing so, the study provides an insight that could help advance the field.

## 2 Research method

Given the paper’s aims, a systematic review of the extant sustainable HRM literature was undertaken. Systematic literature reviews are essential for revealing emerging issues and identifying the challenges for future studies (Sauer and Seuring 2023; Zhang et al. 2019). The approach should include specific steps to: find the available articles published on the subject; develop a structured classification on the theme; to

identify the main results of the articles; and expose the gaps and direction for future studies (Bartocci et al. 2017). By definition, a systematic review should present an image of the research question(s) in a clear and reproducible approach (Tranfield et al. 2003).

The present study collected data in January–March, 2021, October–December 2021, November, 2022, and May 2023. Numerous searches for articles relating to sustainable HRM and uncertainty were conducted during these periods. The databases used were the Web of Science and Scopus, considered the most critical global databases (Wang and Waltman 2016). The terms used in the search were ‘Sustainable Human Resource Management’, ‘Green ‘HRM’ ‘Triple Bottom line’, ‘Common Good Human Resources Management’, ‘Socially Responsible Human Resources Management.’

Using this method, we built a reliable knowledge base of sustainable HRM. Our analysis process includes categorizing and classifying the existing literature in sustainable HRM (across the full range of HRM practices), using papers published from 2010 until 2023. This period tracks the development of the field from the time that influential sustainable HRM papers (i.e. Ehnert’s 2009 seminal work) began to increase. This process finally produced over 85 journal articles, books, and book chapters for analysis across an extensive range of business and management journals. This study focuses on those papers that report empirical findings, develop theoretical arguments, and produce integrative literature reviews. For the purpose of this paper, the H-Classics methodology which centres on determining which publications are the most influential in a given area of research and is influenced by the number of citations received (Manesh et al. 2020).

### 3 Theoretical background

#### 3.1 The impact of global uncertainty

Uncertainty and risk are fundamental concepts often used in decision-making, finance, economics, and many other fields, and are managed quite differently. While risk refers to a situation where the potential outcomes of a decision or action are known, and there is a measurable probability assigned to each outcome, uncertainty refers to a situation where the outcomes of a decision or action are unknown (Kahneman 2011). Thus, uncertainty represents more unpredictability (Gifford 2010). In mathematics, uncertainty is often quantified using Uncertainty theory for studying the behaviour of subjective uncertainty and is grounded on measured axioms (Liu 2007).

The response of an organization and its HRM department to uncertainty can differ significantly depending on whether the uncertainty is endogenous (internal) or exogenous (external) (Schuler and Tarique 2007).

Endogenous uncertainty arises from within the organization itself. It might be related to internal processes, employee performance or behaviour, management decisions, or technological changes. In contrast, exogenous uncertainty refers to external environment fluctuations and technological advancements, such as changes due to

Industry 4.0 and artificial intelligence (AI). In this way, endogenous and exogenous uncertainties present distinct challenges that require different responses from an organization and its HRM (Schuler and Tarique 2007). The main difference lies in the source of uncertainty and the focus on strategies to address them. However, it is essential to remember that these responses are not mutually exclusive and often need coordination to respond effectively to uncertainty (Maley 2019).

Uncertainty theory provides a framework for understanding how individuals manage uncertainty, predictability, and information in various contexts. For instance—Uncertainty theory tells us that, directly or indirectly-global, uncertainty will impair a firm's ability to meet financial performance indicators (Engle et al. 2008). Organizations must do more with less. The reduction in spending inevitably means there will be a tightening of expenditure budgets (Bedford et al. 2022). However, Uncertainty theory also tells us that uncertainty is inevitable but is usually manageable. For a firm in a crisis, this could involve developing contingency plans, improving flexibility and adaptability, or investing in risk management strategies. Thus, uncertainty theory can provide valuable insights for firms dealing with a crisis. Hence, while (as mentioned above) a crisis can create a paradox between sustainability performance outcomes—economic, social and environmental (Hahn et al. 2018; Kramar 2014, 2022), it can be managed.

In recent years there has been significant exogenous uncertainty (Ereerdi et al. 2022; Jebran and Chen 2023). In addition to the healthcare and economic repercussions of Covid-19, fluctuating geopolitical tensions, trade wars, sanctions, and policy shifts are causing global uncertainties (Boucken et al. 2022). Firms must manage the risk associated with volatile tariffs, compliance with diverse regulations, and potentially relocating manufacturing or altering supply chains. Rapid advancements in AI are reshaping industries and raising uncertainty about future trends and necessary skills (Dabić et al. 2023). These crises have immensely impacted all aspects of businesses, innovation and global management (Gabriel and Aguinis 2022). Firms must deal with intense unanticipated changes while strategically considering the long-term consequences of these crises (Boucken et al. 2020). Therefore, the characterization of uncertainty in business is a consequence of many exogenous and endogenous factors (Duncan 1972), and, predictably it will adversely impact decisions about Sustainable HRM (Kramar 2022; Ren et al. 2023).

### 3.2 Strategic HRM

The strategic role of HRM has expanded over the past few decades. As a result, organizations have increasing pressure to provide HRM processes that provide extensive value to the firm (Kramar 2021). Correspondingly, the literature on strategic HRM has steadily expanded, covering a variety of complexities. In their seminal research, Schuler and Jackson (1987) stress the importance of vertical (i.e. firm strategy) and horizontal (i.e. HRM processes) alignment, and the vital role of the external environment, which precisely fits this thesis.

Building on Schuler and Jackson's (1987) model of strategic HRM, Ehnert (2014) offers a sustainable model of HRM. Sustainable HRM adds to strategic HRM

by considering the consequences of HRM beyond the employer–employee relationship (Van Buren 2020). A strategic HRM model that could incorporate the ideals of Schuler and Jackson (1987) and at the same time incorporate Ehnert's (2014) transformational role of sustainable HRM was used as a template for this study. The present study builds on these two models by embedding sustainable HRM into the organization ethos that can serve as a helpful framework to manage the implications of uncertainty. The model of sustainable HRM incorporates many of the elements put forward by Jackson and Seo (2010), such as the basic assumptions underlying strategic HRM and Ehnert's (2014) notion of the importance of achieving goals that satisfy both employers and employees.

### 3.3 Sustainable HRM

The features of Sustainable HRM are diverse and differentiate it from strategic HRM. Kramar (2022, p. 141) skilfully encapsulates the divergence of Sustainable HRM from Strategic HRM: These characteristics include: “1) *the identification of tensions between desirable organizational outcomes*, 2) *an essential concern with capability development*, 3) *a need to recognize both the positive and negative outcomes of HRM activities*, 4) *attention given to the development and implementation of HRM activities*, 5) *the explicit statement of values and ethics informing Sustainable HRM*, and 6) *sustainable HRM metrics that are designed to promote organizational, economic and ecological social change*.”

Furthermore, the essential differences relate to the outcomes, and these outcomes are concerned with explicitly identifying the negative and positive effects of HRM for a variety of stakeholders. In this situation, tensions may surface from the duality between productivity goals and human well (Mariappanader 2016). However, sustainable HRM recognizes the tensions of competing organizational objectives (Chams and García-Blandón, 2019; Van Buren 2020). Equally, sustainable HRM has many disparate conceptualizations (*for an extensive overview of definitions see Macke and Genari 2019*). A definition of sustainable HRM provided by Aust et al. (2018, p. 358) refers to operationalization of sustainable HRM in terms of “*the adoption of HRM strategies and practices that enable the achievement of financial, social, and ecological goals, with an impact inside and outside of the organization and over a long-term time horizon while controlling for unintended side effects and negative feedback*.”

However, Kramar (2014, p. 1084), provides a substantial definition for sustainable HRM as “*the pattern of planned or emerging HRM strategies and practices intended to enable the achievement of financial, social and ecological goals while simultaneously reproducing the HR base over a long term. It seeks to minimize the negative impacts on the natural environment and on people and communities and acknowledges the critical enabling role of CEOs, middle and line managers, HRM professionals and employees in providing messages which are distinctive, consistent and reflect consensus among decision-makers*.” Together, these two well recognized definitions tend to capture the principle of the topic. These definitions suggest that HRM strategies and practices can support the sustainable use of HRM within a

business context. Accordingly, sustainable HRM is not just about business goals (Kramar 2022; Ren et al. 2023).

Sustainable HRM is focused on decisions that impact the workforce and society. Aligned with this notion, stakeholder theory (Freeman 1984) advocates that managers need to reflect on the interests of the all members who are impacted by decisions made by the organization. For example, any individual or group who can affect or is affected by actions, decisions, policies, practices or goals of an organization (Freeman et al. 2021). This theory particularly refers to exogenous turbulence and supports that the manager must look past profit and shareholder wealth, and consider the interests of the individuals and their wellbeing (Mariappanader 2016). Stakeholder theory is therefore useful to support the notion of sustainable HRM in a crisis.

Sustainable HRM considers the importance of HRM at three levels: macro, meso and micro; and it acknowledges that HRM impacts people and groups in positive and negative ways (Ehnert et al. 2016; Ren and Jackson 2020; Kramar 2014). The macro refers to the exogenous or external HRM environment, the meso the management level and the micro the individual level (Storey et al. 2009). The macro-level HRM is directly impacted by an uncertain exogenous environment (Novak 2021), which poses threats to the firm's performance and future (Carnevale and Hatak 2020). While most organizations experience exogenous uncertainty (Weick and Sutcliffe 2011), those who are adept at *making sense* of the implications of uncertainty at the meso and micro level will best survive it (Hermann 2008).

Sensemaking theory is a conceptual framework that helps people understand and interpret their experiences, particularly in the face of ambiguity or uncertainty (Weick 1988). It's a process through which individuals, and sometimes organizations, create meaning out of the complex and sometimes chaotic situations they encounter. According to Maitlis and Sonenshein (2010), it involves constructing narratives to create order and predictability in uncertainty, helps foster understanding through shared interpretation; guides our actions, supports adaptations, and encourage reflection. This dynamic nature of sensemaking allows for continual learning and adaptation to changing circumstances (Maitlis and Sonenshein 2010).

At the meso level, sensemaking is a very powerful research lens for understanding how managers make sense of and enact their realities (Podgorodnichenko et al. 2021). Sensemaking can enable a proactive response to sustainable HRM sensemaking (Podgorodnichenko et al. 2021). However, sensemaking is complicated at the meso level (Poon and Law 2022), as the reaction to uncertainty has a greater risk of increasing the likelihood of a catastrophe (Weick 1988). For instance, uncertainty creates a situation of mounting pressure to reduce firm costs dramatically and rapidly (Bloom et al. 2018) while at the same time increasing revenue (Bloom, et al. 2018) and shareholder dividends (Lazonick et al. 2020; Whoriskey 2020), and thereby frequently creating an impossible balancing act (Maley 2019).

Meso sensemaking in uncertainty has traditionally been reactive and focused firmly towards improving profits, typically reducing avoidable investments (Bloom et al. 2018). Managers are often confronted with making difficult decisions involving tensions between short-term and long-term outcomes and pressures between financial, human and social outcomes. This dichotomy means that cost reduction

decisions are often not performed logically or strategically (Bloom et al. 2018; Maley 2019). Managers have difficulty making sense of these directives and assessing probable outcomes (Carpenter and Fredrickson 2001). For instance, in uncertainty managers at the meso level become very cautious about employee investment at the micro level (Bloom 2017; Bloom, et al 2018; Bassi and McMurrer 2007; Fisher 2020; Fowler 2020; Maley 2019; Sheehan 2014; Sobieralski 2020).

Sensemaking theory, at the micro level implies a process of clarifying events or situations by interpreting informational signals from the environment. This process involves employees translating signals into familiar frames (Weick 1988). These frames can be presented in different ways to guide the sensemaking process rooted in the cognitive process, as individuals attribute meaning to environmental stimuli implying employees will give new meaning to uncertain situations (Zhang et al. 2023). For example, during Covid-19 employees had to make sense of the unprecedented number of layoffs (Fisher 2020; Fowler 2020; Ryder 2020). At the beginning of the pandemic, Caterpillar suspended operations at two US plants and a foundry, Levi Strauss closed stores globally, and toolmaker Stanley Black and Decker initiated extensive global redundancies (Whoriskey 2020). MNCs such as Exxon, Goldman Sachs, Cineworld immediately cut staff worldwide, and the global airline industry witnessed mass redundancies, and Jobs in tourism, the gig economy and flexible contracts were hit particularly hard (Spurk and Straub 2020).

In the UK, many employees had to make sense of being '*furloughed*' during the Covid-19. Not only had most never heard of the term '*furlough*' they had to make sense of its consequences. Furlough is a type of shutdown; though it was envisaged that workers could maintain employment security, in many cases, furlough became a holding pattern before redundancy (Stuart et al. 2021). At the same time, those employees who did survive and perhaps make sense of the furlough suffered from obsolete capabilities (Baranik et al. 2019; Haarhaus and Liening 2020) and moreover, the loss of motivation to return to work (Anand et al. 2020; Sarwar et al. 2023). According to Heath et al. (2022) the fear and uncertainty created by Covid-19 caused strained the employer–employee relationships and breached the employee psychological contract. Zhang et al. (2023) argues that many employees could not make sense of their managers actions and could not read their signals. At the same time, during Covid-19 and the ensuing uncertainty, sensemaking theory tells us that employees had to make sense of not only the uncertainty—but the managers' reaction (meso level) to changing situations and in some cases the weakening of sustainable HRM ambitions (Kramar 2022; Lu et al. 2023), confirming the importance of individual sensemaking in both a crisis and when implementing Sustainable HRM (Lu et al. 2023).

Certainly, many commentators are increasingly questioning the wisdom of meso sensemaking and often impulsive reaction during the height of the Covid-19 pandemic. At the same time, at the micro-level, the availability of motivated staff with the right capabilities is holding back the recovery of most western economies (McKinsey 2023). The evidence is increasing obvious that the impetuous management cost cutting reaction to the pandemic has damaged trust between the firm and the employee beyond repair, and there is an unusual lethargy and willingness to return to work (Bajrami et al 2021). According to Mariappanadar



(2016), the signs of lethargy and demotivation may be due to the potential ‘harm of work.’ The harm of work refers to the negative externality of HRM practices that produce poor work-related health and social well-being (Mariappanadar 2016; Kramar 2014). The harm of work theory draws attention to potential health harm and the social harm of work in a crisis and uncertainty. More recently, Mariappanadar and Hochwarter (2022) building on the concept of harm and drawing on Human Energy Theory, provide evidence for the ceiling effect of human energy when employees encounter cumulative adverse working demands, signifying the harm of work reduces productivity.

The evidence is mounting that management meso actions resulting from the uncertainty of Covid-19 may have caused unprecedented damage at the micro-level to employ capabilities, morale, trust and motivation to return to work. Individual capability is a general term that includes technical skills, functional expertise, collaboration and social expertise (Korherr, and Kanbach 2021; Maley 2019). Consequently, the outcomes from uncertainty at the meso and micro HRM levels impact the short and long-term supply of talented human resources, potentially affecting future business realization (Bajrami et al. 2021). It is evident from the COVID-19 reaction that organizations generally need a better understanding of their employee resource base, their sensemaking and recognize how short-term decisions impact not only the future supply of employees and their capabilities, but also their well-being which is essential for supporting and sustaining future business.

The implications from uncertainty can threaten an organization’s long-term goals and sensemaking of these goals at the macro, meso and micro level. Moreover, the weaker the sensemaking, the more likely uncertainty will get out of control (Weick 1988). To successfully navigate the implications of uncertainty requires a delicate trade-off between typical perilous management actions that produce long-term organizational damage, generate anxiety and causes harm to employee health to actions that ease anxiety, appease all stakeholders and help organizations survive long term. The resource-based view (RBV) of the firm is a theory that does provide valuable insights into understanding organizational longevity and success.

### **3.4 The resource-based view, Dynamic Capabilities and Absorptive Capacity in uncertainty**

The RBV (Barney 2001), suggests that the strategic resources a firm possesses are the primary determinants of its competitive advantage and success for longevity. This perspective sees the workforce as more than just a cost but as a valuable resource that can drive firm performance. Employee capabilities, including their knowledge, skills, experiences, and abilities, are seen as valuable, rare, difficult to imitate, and hard to substitute—the four key criteria for a resource to be a source of sustained competitive advantage according to RBV. The proposition of RBV is that by investing in employee capabilities through training, development, and continuous learning, a firm can differentiate itself and gain an advantage over competitors. Moreover, this approach underlines the importance of building sustainable employee capabilities since they not only increase operational efficiency



but also contribute to the strategic, competitive position of the firm and most importantly prepare the firm for the future. Furthermore, the RBV also suggests that employee capabilities will be sustainable and challenging to imitate, or copied by competitors. Consequently, using the RBV theory, one can understand and justify the importance of developing and nurturing employees' capabilities for the long-term success of the firm (Singh et al. 2020)—which is at the core of Sustainable HRM.

However, the RBV has been criticized for being static and not fully accounting for the dynamics of competitive environments, or extend to recognizing the value of new external information. In response, the Dynamic Capabilities (Teece 2007) suggests that in rapidly changing environments, firms need capabilities to sense and capture opportunities, and to reconfigure their resource base accordingly. Correspondingly, Absorptive Capacity (Cohen and Levinthal 1990) refers to a firm's ability to recognize the value of new external information, assimilate it, and apply it to commercial ends. In essence, it is a measure of a firm's ability to learn and innovate. It would be most accurate to say that understanding organizational longevity and through the prism of sustainable HRM likely requires a multi-faceted approach incorporating insights from several theoretical perspectives.

Dynamic Capabilities are particularly useful during periods of uncertainty because they help to promote change. Teece (2007) defines dynamic capabilities as enablers that build, integrate or reconfigure functional competences. Dynamic Capabilities put emphasis on resource development and regeneration and have the capacity to purposefully create, extend or modify resource and capability bases to address macro-environmental changes (Eriksson 2014). At the same time, Dynamic Capabilities are impacted by the firm's existing HRM meso, and micro practices (Teece 2007). For example, firm Dynamic Capabilities are predisposed by the capabilities of employees who play a critical role in the organization's ability to adapt to new circumstances (Eisenhardt and Martin 2000). For example, Santana and Díaz-Fernández (2022) analyzed the individual capabilities necessary for implementing and leveraging AI within organizations and found that Dynamic Capabilities are essential to manage AI.

In order to manage uncertainty managers, need to understand that uncertainty is very different from standard risk, which can be managed using traditional managerial approaches (Teece et al. 2016). For example, in a state of uncertainty employees and, in particular, managers need to accomplish two chief objectives: they need to be able to make sense of the change (Hermann and Dayton 2009) and they must also be able to act upon the threat and reality of uncertainty (Protogerou et al. 2008).

More recently, managing uncertainty is seen as a capability in its own right (Bartocci et al. 2017). Furr (2019) asserts that that top performers need to understand how to steer the unknown, and employees need to develop the capability to deal with uncertainty and discover opportunities. Dynamic Capabilities help generate new knowledge, solutions or resource configurations, all of which are indispensable qualities desirable in an uncertain environment. Thus, addressing change at the HRM macro-level facilitates meso change to create Dynamic Capabilities which create and extend capabilities at the micro-level to accomplish sustainable HRM

goals, and according to Teece (2007) organizations need Dynamic Capabilities to successfully navigate uncertainty.

The theory of Absorptive Capacity, an extension of Dynamic Capabilities, should also be considered in uncertainty to stress the importance of developing the capabilities of innovation and fostering knowledge creation (Cohen and Levinthal 1990). According to Cepeda-Carrion et al. (2012), a firm's Absorptive Capacity involves engaging in new practices and supporting employee's agility and flexibility to adapt to procedures that are likely to differ from the existing familiar ones. The chief distinction between agility and flexibility is that the former places far more importance on the higher levels in the hierarchy (Baker 1996). Therefore, it is feasible that agility is the response flexibility at macro level, enabled by flexibility at the meso and micro levels (Baker 1996).

In an uncertain and dynamic environment, firms must be able to quickly respond to macro changes. In turn, the ability to respond at the meso level offers the firms the tractability to adapt and react speedily to changes and to implement actions to address uncertainty (Sherehiy et al. 2007). Consequently, an approach that enables both macro agility and meso and micro flexibility is important when considering the best way to manage HRM (Maritan 2001). In this way, agility and flexibility are central to the concept of Absorptive Capacity (Camisón and Forés, 2011; Zahra and George 2002), and are essential to manage uncertainty (Atkinson 1984).

The theory of unlearning (Cepeda and Vera 2007) suggests that, in uncertainty, a lack of investment in employees could over time result in the loss of useful capabilities and the flexibility required to foster new capabilities. Employees can unlearn knowledge or decide it is no longer useful (Klammer and Gueldenberg 2019). Ultimately, parallel to Piaget's (1950) early theories of learning, studies generally agree that capabilities are built on prior related experience and knowledge (Cohen and Levinthal 1990). However, in times of uncertainty, it appears to be vital to acquire new capabilities. Thus, in uncertainty, Absorptive Capacity is operationalized to create flexibility, avoid unlearning and react speedily to change in order to preserve the goals of sustainable HRM.

Thus, Dynamic Capabilities and Absorptive Capacity add to RBV by providing frameworks that highlight the importance of capability development in different ways. Dynamic Capability emphasizes the need for agility to address macro-environmental changes. Accordingly, enabling employee capabilities necessary to operate during a crisis. While, Absorptive Capacity highlights the need to introduce new practices and enhance meso and micro flexibility so that new knowledge is transferred from the external environment. Thus, in different ways, involving a reciprocal process, where any one element can influence another. Hence, Dynamic Capabilities and Absorptive Capacity help support a sustainable approach to HRM.

Therefore, RBV, Dynamic Capabilities, and Absorptive Capacity can be linked together: the RBV provides a rationale for why resources can create competitive advantage, the Dynamic Capabilities perspective explains how firms can adapt and renew their resources in changing environments, and Absorptive Capacity is an example of such a Dynamic Capability, explaining how firms learn and innovate by absorbing knowledge from the environment.

While several scholars have proposed that sustainable HRM is a firm capability (i.e. Gollan 2000; Leonidou and Skarmas 2017), the notion of sustainable HRM as a legitimate employee capability is mainly absent from the capability-sustainability conversation (Chams and García-Blandón 2019; Kramar 2014; Van Burren, 2020). The issues here are that a capability for sustainable HRM at the micro level is not a single capability in itself; it is a combination of multiple features. Following this logic, an employee capability for sustainable HRM can be defended by building on the concept of RBV, Dynamic Capabilities and Absorptive Capacity by defining sustainable HRM as a micro-level capability for managing uncertainty. This approach denotes that several employee capabilities are necessary to realize the *triple bottom line* objectives of sustainable HRM. Predominantly, for this reason, RBV, Dynamic Capabilities and Absorptive Capacity have been incorporated into the sustainable HRM causal model. This model involves the ability to manage the *triple bottom-line* paradox.

### 3.5 Model development

Figure 1 illustrates how micro-level capabilities are built to support sustainable HRM in uncertainty. In this model, the mechanisms of sustainable HRM in uncertainty are illustrated in four columns—from left to right. The first column shows the triggers of uncertainty is influenced by economic instability and political flux (Giegerich et al. 2021). A situation that is managed through a sustainable HRM (2nd column) and a series of macro, meso and micro decisions (3rd column), which lead the sustainable HRM outcomes (4th column).

Macro decisions (3rd left, top) facilitate firm agility and enable decisions at the meso-level (3rd left, middle). Decision making at the macro-level can be understood through the lens of stakeholder theory which, as mentioned earlier, conveys the idea that the welfare of all stakeholders should be considered (Freeman et al. 2021). Stakeholders consist of internal stakeholders (top management, line managers, employees) and external stakeholders (shareholders, trade unions, government,

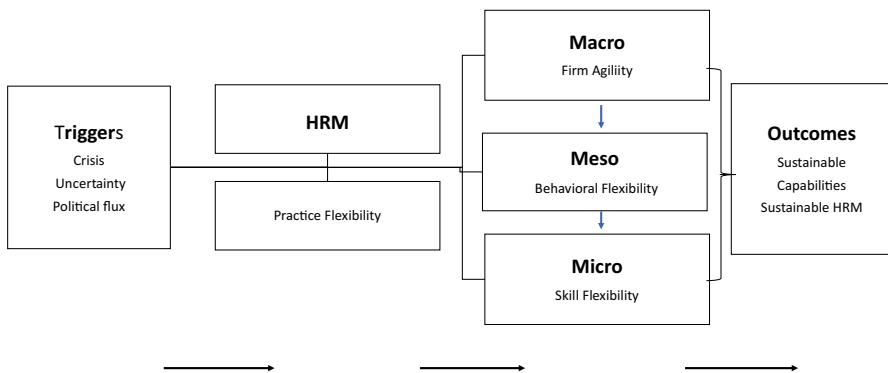


Fig. 1 The framework to support and operationalize sustainable HRM

suppliers, and interest groups). In turn, meso-level decisions support behavioural flexibility and ultimately enables employee development at the micro-level (3rd left, bottom) avoiding any tendency for unlearning and enabling employee flexibility. In this way, (1) macro firm agility encourages (2) meso behavioural flexibility which enables skill development at the (3) micro level. See Fig. 1.

HRM Practice flexibility governs the entire process utilizing RBV, Dynamic Capabilities and Absorptive Capacity to sanction longevity, agility and flexibility to operationalize the capabilities necessary to support a sustainable approach to HRM. Lastly, a reverse loop from capabilities back to uncertainty thwarts the adverse outcomes of macro uncertainty and its typically short-term strategy that limits the many positive outcomes of a sustainable approach to HRM. Eventually, the model enables the agility and flexibility necessary for sustainable HRM. More precisely, the next section will discuss how that will be operationalized. This model builds on Schuler and Jackson's (1987) vertical firm strategy, horizontal HRM processes and the vital role of the external environment, which embodies strategic HRM, and Ehnert's (2014) agenda that adds sustainability to the overall framework with the idea of achieving goals that satisfy both employers and employees. Which in turn, aligns with stakeholder theory by encouraging managers to reflect on the interests of the all members who are impacted by decisions made by the organization, and sensemaking theory in terms of employees giving new meaning to uncertain situations (Zhang et al. 2023).

## 4 Discussion

This study explores how sustainable HRM can be operationalized in an uncertain environment. More specifically, the study draws on uncertainty during and following the 2020–2022 COVID pandemic. The key objective was to discover how sustainability could be supported with HRM practices and strategies in an environment of uncertainty. Thus, operationalization refers to shaping an abstract idea into a tangible practical one. In order to do this, RBV, Dynamic Capabilities and Absorptive Capacity are used to support a causal framework to highlight sustainability HRM's role in a crisis. Essentially the model relies on agility and flexibility inherent in Dynamic Capabilities and Absorptive Capacity, and longevity and sustainability evident in RBV. The next section explains how behavioural flexibility, skill flexibility and HRM flexibility frameworks help operationalize sustainable HRM.

### 4.1 Behavioural flexibility

Behavioural flexibility encompasses the capacity of managers to help employees adapt to changing circumstances and concerns, building a culture for higher tolerance for non-routine behaviour (Bhattacharya and Wright 2005). Such a culture would encourage employee flexibility (Bhattacharya et al. 2005), facilitating change and innovation (Camps et al. 2016).

According to Bowen and Ostroff (2004), an employee's behavioural flexibility will increase through HRM climate strength—which refers to employees sharing a common interpretation of what kind of behaviour is rewarded. For example, Bowen and Ostroff (2004) claim that in order for the firms' HRM strategy to be effective, employees should perceive HRM as distinctive (i.e. both the event and outcome are highly observable), consistent (i.e. both the event and outcome are the same across modalities and time), and consensual (i.e. the idea that there is an agreement between entities as to the relationship between the event and its outcome). This suggests that for actions taken in uncertainty to be effective, they need to be transparent, anticipated, and clearly communicated to all employees.

Drawing on Dynamic Capabilities, the outcome of HRM decisions in uncertainty need to be humane (Van Buren, 2020), or in Mariappandar's (2016) viewpoint—minimization of the harm of work. Thus, HRM climate or strength is achievable by clarifying to employees the way the organization will manage the heightened period of uncertainty. For instance, if the business strategy changes to focus on the delivery of challenging short-term financial targets, organizations must communicate to employees in a distinctive, constructive and confident manner (DuBois and Dubois 2012). If the firm requires employees to work from home, the organization must ensure that all employees have adequate notice, clear communication and share the same understanding on why this decision has been made, and the support that will be available to enable them to work at home productively. In this way, when firm flexibility is explained openly to employees, HRM will have strength, and it will be an enabler of the humane treatment of employees. A philosophy that aligns well with Mariappanadar and Aust's (2017) avoidance of the dark side of work.

## 4.2 Skill flexibility

Skill flexibility comprises the breadth of individual skills available to the organization, the versatility of these skills and the ability of employees to acquire new skills (Wu 2010). In uncertain times, when budgets are restrained, a cost-effective way the firm may develop skill flexibility is through processes such as job rotation and projects which engender broad-based skills. However, the organization must also afford some degree of investment in renewed employee skills in a crisis, although this can create tension with the need to manage costs (Maley 2019). Nevertheless, both Dynamic Capabilities and Absorptive Capacity offer alternative ways to manage this tension by encouraging managers to make decisions that consider economic and human outcomes (Bhattacharya and Wright 2005). According to the underpinnings of Absorptive Capacity, 'on the job training' could be quite useful in helping skill development within budget constraints (Ford 2016). Job rotation and on-the-job training are well established training methods that are often overlooked nowadays, yet they can be extremely useful and cost-effective methods of skill development.

### 4.3 HRM practice flexibility

HRM practice flexibility refers specifically to the agility of HRM practices across the organization (Bhattacharya and Wright 2005) and the extent to which the firm can quickly enable flexibility to adjust HRM processes to manage uncertainty (Kumari and Pradhan 2014). Moreover, flexible HRM is needed to manage future challenges. For example, Agarwal et al. (2022) make a strong case that HRM performance management process flexibility is particularly important to manage the challenges of disruption caused by Industry 4.0. Correspondingly, Dabić et al. (2023) in their recent study of sustainable HRM in digital work reason that the future of work depends on employees' and organizations' flexibility and agility to new technological developments. Thus, agile HRM practice is the key to enable employee skill flexibility and employee behavioural flexibility. HRM internal practice flexibility as part of sustainable HRM can be broadly categorized into financial and work flexibility (Bücker, and Peters 2019).

Financial flexibility refers to payment, depends on employees' performance and could mean options such as performance-related pay or bonuses, which may motivate employees to work longer hours in order to achieve higher performance (Bücker, and Peters 2019). This plan could incorporate an increased percentage of variable pay, including objectives aligned with various aspects of HRM sustainability. Such a plan may induce employees to adapt more quickly to changing business demands in uncertainty and allow the firm to achieve revised strategic goals created in uncertain times. The role that prudent financial incentives play in influencing employee behaviour has been widely acknowledged and more recently recognized as particularly useful in times of uncertainty (Maley et al. 2020).

Notwithstanding, pay-for-performance is not easy to implement and, if mismanaged, can have a destructive effect on intrinsic motivation, self-esteem, teamwork, and creativity (Beer et al. 2004). According to dynamic capability theory, particularly tough or unattainable financial targets may not be ethical or humane. Additionally, the extant literature suggests that the introduction of pay-for-performance may have to be handled with a degree of sensitivity when dealing with cultures that are not individualistic (Chiang and Birtch 2012). Consequently, pay-for-performance schemes, while offering benefits in uncertainty, must be rigorous in design and carefully implemented to avoid these pitfalls.

Work flexibility refers to employees varying their employment contracts. While some work flexibility programs appear to offer more incentive for the firm in relation to cost-saving, other programs offer clear benefits to employee well-being. For example, zero hours, part-time contracts, or reduced work time and flexible labour contracts clearly favour the employer (Byrne et al. 2018), have potential to create harm of work (Mariappander 2016)—by neglecting the humane criteria rooted in dynamic capabilities. Conversely, other work flexibility programs, such as working flexibility from home (as mentioned above) and family enrichment programs, offer a variety of measures of improved health and well-being of employees (Stavrou et al. 2015), sidestep the dark side of work and have been argued to help build resilience to stress (Coyne et al. 2020).

During the COVID-19 crisis, Coyne et al. (2020) found that parents may be dealing with the stress of going back and forth to work and the potential contamination of their homes, anxieties of home-schooling their children while attempting to keep up with their own job requirements, and some may have elderly parents whom they need to help. Indeed, experience in the COVID-19 crisis demonstrated that to work at home effectively requires expert HRM practice flexibility, which may necessitate some degree of parental leave, changes in work arrangements such as part-time work, flexible location and hours (Spurk and Straub 2020).

There now exists a considerable body of research that has examined work flexibility, and it is widely acknowledged that, if managed well, flexible work can have positive outcomes for both employees and the firm. HRM flexibility can help create capabilities that are receptive to uncertainty and a changing environment. However, the critical point here is that HRM practice flexibility should not be a passive response to uncertainty but reflect the ability of an organization to make changes in order to proactively encourage sustainability. Absorptive Capacity and Dynamic Capabilities will support HRM to manage uncertainty.

Nonetheless, the RBV will help ensure longevity of the organization by placing great importance on a long-term sustainable approach to HRM by advancing training and development, recognition of performance, fair compensation, fostering innovation, promoting a positive work–life balance culture and strategically aligning workforce planning for the future. Though, not explicitly linked to the sustainable HRM, the RBV it inherently applies many of the principles of the sustainable HRM by viewing employees as key resources that need to be developed and managed for long-term organizational success and sustainability. Thus, RBV acts as the capstone theory that builds on the Dynamic Capabilities and Absorptive perspective, to further enhance the firm's agility and flexibility, and building a resilient organizational sustainable HRM culture.

Table 1 illustrated how flexibility is integral to operationalization of sustainable HRM at the behavioural, skill and HRM practice level.

#### 4.4 Limitations and future studies

This study is not without limitations. By definition, this conceptual paper does not present data. However, it does present an original theoretical model by synthesizing knowledge from previous work on sustainable HRM, uncertainty and the RBV, Dynamic Capability and Absorptive Capacity framework. The findings present a novel context to provide a springboard for new research that will fill knowledge gaps. In the future, updating and extending our understanding of how contextual variables are likely to influence sustainable HRM will be an important advance in global HRM scholarship. According to Ren and Jackson (2020), there is an urgent need to specify clarity to the concept of Green HRM, and we concur that this applies to the principles of sustainable HRM too. Likewise, there is a gap in knowledge concerning the barriers to effective implementation of Sustainable HRM and the role of RBV, Dynamic Capabilities and Absorptive Capacity in helping to overcome any barriers through the construction



**Table 1** A summary of flexibility capabilities for operationalization of sustainable HRM practice

Behavioural flexibility	Skill flexibility	HRM practice flexibility
Inspire a higher tolerance for non-routine behaviour	Make decisions that consider economic and human outcomes	Financial flexibility—increase % of variable pay
Give employees more autonomy	Appraise individual skills available to the organization	Financial flexibility—spot bonus
Give employees more flexibility	Analyze the versatility of employee skills	Financial flexibility—employee MBO/KPIs aligned with of HRM sustainability outcomes
HRM to be more distinctive, consistent and consensual	Analyze the skill gaps	Work flexibility—vary employment contracts to benefit all stakeholders
Increase transparency—by increasing communication at macro and meso level	Authorise cost effective skill training as a fundamental part of employee performance management	Work flexibility—working from home—with mgmt. support in terms of building employee resilience

of sustainable capabilities which pave the way for future empirical research to understand what skills and knowledge can enable sustainability as a strategic firm capability.

## 5 Conclusion

The study has identified many challenges for firms implementing and maintaining a sustainable HRM program. These challenges intensify in economic uncertainty, and the firms' sustainable HRM endeavours will likely be terminated. The adverse outcomes of economic uncertainty on employees are identified, and the potential of a sustainable HRM approach for the firm and its stakeholders during periods of economic uncertainty is reasoned. A model emphasizes how managers can operationalize a sustainable approach to HRM management in times of uncertainty. Accordingly, the conceptual study's essential contribution to theory is that it presents an original causal framework supported by Barney's (2001) Resource Based View (RBV), Dynamic Capability (Teece 2007), and Absorptive Capacity (Cohen and Levinthal 1990) to enable individual capability development in uncertainty.

For theory, this study makes an original contribution to the extant literatures by intersecting the sustainable HRM, uncertainty, RBV and Dynamic Capabilities and Absorptive Capacity concepts to create a new framework that is additionally supported through stakeholder theory, the theory of harm of work and sensemaking theory. In doing so, the model acknowledges the extant literature on sustainable HRM and builds upon it by providing a unique causal model that demonstrates the significant returns of a sustainable approach to HRM post pandemic for the organization and the employee. The model helps make sense of uncertainty which according to sensemaking theory (Weick and Sutcliffe 2011), those who are adept at *making sense* of things will best survive it (Hermann 2008).

The contribution to practice is long overdue; the model explains how sustainable HRM can be operationalized more effectively in the uncertain workplace. The development of the characteristics of stages of Sustainable HRM necessary in uncertainty will assist in understanding the processes required and provide a guide to managers for their applications into organizations. The practical model presented extends our applied knowledge about sustainable HRM by explaining how it can be operationalized effectively in uncertainty and by advocating that it has an imperative role to play in the organization in times of economic uncertainty. Boudreau and Ramstad (2005, p.134) point out, sustainable HRM is not just good ethics; it is potentially good long-term economics.' The model presented in this study is aligned with this spirit. Mobilizing capabilities towards sustainability concerns can accordingly be a major driver of improved organizational ethical and economic impacts. The upshot of uncertainty is that it is particularly dynamic and can present new and unpredictable challenges that require the ability to change—according to Einstein—the measure of intelligence!

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**Data availability** My manuscript has no associate data.**Open Access** This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

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