ARTICLE IN PRESS

Human Resource Management Review xxx (xxxx) xxxx



Contents lists available at ScienceDirect

Human Resource Management Review

journal homepage: www.elsevier.com/locate/hrmr



HRM institutional entrepreneurship for sustainable business organizations

Shuang Ren^a, Susan E. Jackson^{b,*}

- ^a Deakin Business School, Deakin University, 70 Elgar Road, Burwood, Victoria 3125, Australia
- ^b School of Management and Labor Relations, 94 Rockafeller Road, Rutgers University, New Brunswick, NJ 08894-8094, USA

ABSTRACT

As businesses experience greater pressures from a variety of stakeholders concerned with promoting a balanced approach to managing the competing demands for increased profitability, improved social conditions, and restoring the health of planet earth, new opportunities arise for HRM scholars and professionals to contribute to the pursuit of sustainability. However, the foundational logic of sustainability diverges significantly from the dominant perspective in today's business environment. Building upon the institutional theory literature, we introduce the concept of HRM institutional entrepreneurship to examine the paradoxes and emerging opportunities associated with the urgent need for more sustainable approaches for managing business organizations. As a guide to future work, we describe how the actions of HRM scholars and professionals can stimulate evolution from an HRM philosophy that relies on financial indicators to assess effectiveness towards an HRM philosophy that promotes a tripartite approach to sustainability, showing equal concern for economic, environmental and social performance. Focusing on organizational changes that improve environmental performance, we apply the concept of HRM institutional entrepreneurship to consider ways for HRM professionals to engage internal and external stakeholders in order to create value in organizations pursuing sustainability. Ultimately, activities that constitute HRM institutional entrepreneurship for sustainable business drive the development of capabilities that characterize ambidextrous organizations.

1. Introduction

Working towards sustainability is one of the grand challenges for business leaders worldwide as they face pressures to address persistent societal problems that are global in scale (George, Howard-Grenville, Joshi, & Tihanyi, 2016). The changes called for inevitably disrupt business practices during the transformation of production and consumption systems. For business leaders, improving organizational performance in all domains of sustainability's so-called triple bottom line—namely, business, society and the natural environment (Elkington, 1997)—requires pivoting away from the single-minded focus on profitability that dominates today's business environment (Krippner, 2011). During this ongoing shift in business mindsets, the intuition that human resources matter has yielded the concept of "sustainable HRM", providing a forum for discussion among HRM scholars seeking to expand the extant boundaries of our field (e.g. De Prins, Van Beirendonck, De Vos, & Segers, 2014; Kramar, 2013; Ren, Tang, & Jackson, 2018).

As this special issue on "Sustainable HRM" illustrates, HRM scholars are now formulating new perspectives that depart from the traditional economic market model of organizational effectiveness to accommodate broader sustainability concerns. Yet, despite the recognition that "HR has an important role to play in sustainability" (Boudreau & Ramstad, 2005, p. 134), the role of HRM-based changes that are central to a transformation towards sustainability remains under-theorized. Emerging research is providing starting points by mapping organizational tensions and suggesting new HRM-stakeholder relationships to support sustainable HRM practices (e.g. Ehnert, Harry, & Zink, 2014), but these complexities have not yet been consolidated in a theoretical framework that clarifies the nature, scope and actions of HRM-based change to promote sustainability. In this article, we use recent theory and research on the

E-mail addresses: shuang.ren@deakin.edu.au (S. Ren), sjackson@smlr.rutgers.edu (S.E. Jackson).

https://doi.org/10.1016/j.hrmr.2019.100691

Received 21 June 2018; Received in revised form 20 May 2019; Accepted 28 May 2019 1053-4822/ © 2019 Published by Elsevier Inc.

^{*} Corresponding author.

phenomenon of institutional entrepreneurship to build such a framework, and in doing so we reimagine the HRM change agent role and its associated competencies and suggest new directions for future HRM research and practice.

Achieving sustainability requires institutional change, during which organizations and individuals question the purpose of business and begin to alter habits and routines that treat economic, social and environmental performance as competing goals, and instead explore the inherent tensions associated with simultaneously pursuing a tripartite definition of performance consistent with sustainability (Ehnert, 2009; Van der Byl & Slawinski, 2015). Whilst strategic HRM scholars increasingly acknowledge HRM approaches to organizational transformation, theory development in this body of work has often been constrained by a logic that evaluates business effectiveness using financial metrics primarily (Francis & Sinclair, 2003). Ranging from the concept of "change-maker" proposed by Storey (1992) to that of "change agent" described by Ulrich (1997), the conventional HRM-based change role is typically assumed to serve as a means for aligning a firm's HRM system with its business strategy for the purpose of maximizing economic returns (Caldwell, 2003). Often ignored are the implications of sustainability's triple bottom line logic for understanding and enacting an HRM-based model of organizational change, exposing a knowledge gap and missed opportunity for the field.

Our purpose in this article is to address this knowledge gap by theorizing a conceptualization of HRM-based change that reflects, reinforces and promotes sustainability as a form of institutional change. We argue that sustainable HRM-based change involves more than the activities associated with the typical strategic change agent role prescribed for HRM professionals, and instead requires initiating and facilitating changes that break from and disrupt the dominant institutional logic. Actors who leverage resources to initiate and implement such divergent change are called institutional entrepreneurs. Following the modern version of neoinstitutional theory, we assume that the actions of effective institutional entrepreneurs reconfigure institutionalized templates. Importantly, however, not all change agents are institutional entrepreneurs (Battilana, Leca, & Boxenbaum, 2009). A strategic HRM role that emphases changes to an organization's HRM system to better align it with established business objectives need not involve institutional entrepreneurship. As difficult as such strategic alignment may be, successful institutional change is even more difficult and complex. Because HRM professionals and an organization's HRM system cross several boundaries within the organization (e.g., between functional and geographic units) and between the organization and external stakeholders, there are many opportunities to enact the role of HRM institutional entrepreneur in the pursuit of sustainability. Building on insights from neoinstitutional theory and research, we introduce the role of HRM institutional entrepreneur to discuss how HRM professionals can engage with the "grand challenge" of sustainability and thereby contribute to addressing a persistent societal problem that is global in scale (George et al., 2016).

Our framework for describing the role of HRM institutional entrepreneurs promoting sustainability contributes original ideas that extend and enrich the existing HRM literature. By exploring how institutional entrepreneurship theory can contribute to the complex phenomena of a transformation towards sustainable business, we describe how HRM-based change and the broader institutional context intersect and interact, thereby offering a new and much needed theoretical foundation for research on organizational change (cf., Lewis, Cardy & Huang, in press). We also introduce new opportunities for the study of sustainability by delving more deeply into foundational issues that arise when considering some HRM implications of the burgeoning literatures describing how institutional logics and paradoxes can stimulate, shape and impede organizational learning and development. By proposing HRM institutional entrepreneurship as a new role for HRM professionals striving to embed sustainability values in organizations, we propose a shift in the dominant metaphor of gaining a seat at the table to that of building a new table and inviting a wide array of guests to join a new conversation. Our framework is intended to contribute to this re-direction by identifying and examining opportunities for HRM professionals to leverage their positions to exercise greater agency in and around organizations striving towards sustainability.

Our discussion begins with a brief review of definitional and theoretical issues to establish the appropriateness of using institutional entrepreneurship theory for the study of HRM and sustainability. Then we compare two different HRM philosophies—managing for strategic alignment and managing for sustainability—to highlight differences in their guiding institutional logics and illuminate how the pursuit of sustainability creates the need for institutional change. After defining the meaning of HRM institutional entrepreneurship, we draw from studies of paradox to examine the role as HRM institutional entrepreneurs and identify key tensions inherent in managing the multiplex demands of sustainability. Dealing effectively with these tensions requires HRM professionals who are capable of identifying opportunities, stimulating the creation of a new vision, mobilizing allies, and solidifying new institutional logics. Thus in the two subsequent sections, we use the paradox lens to focus on the stages of action and required competencies in our framework of HRM institutional entrepreneurship. We close by discussing implications for future research and practice.

2. Institutional theory as a conceptual foundation

As a body of scholarship, institutional theory has evolved over several decades; it encompasses many variations (for excellent reviews, see Scott, 1987; Thornton, Ocasio, & Lounsbury, 2012; Tolbert & Zucker, 1996) and has begun to attract attention among HRM scholars (Lewis et al., in press). Of particular relevance to our discussion here are the concepts of institutions and institutionalization. Broadly speaking, institutions are rules, norms, routines and beliefs that enable coordinated action (Hoffman, 1999). Institutional theorists assume that institutionalization occurs and can be understood at several levels of analysis, including the organizational level (i.e., organizations as a recognized area of institutional life) and the broader economic and political contexts in which organizations are embedded (Dahlmann & Grosvold, 2017).

At any level of analysis—e.g., societies, industries, organizations—multiple institutional logics can be found. Institutional logics are defined as organizing templates or principles that embody an organization's purpose, including the goals it pursues and the means by which it pursues its goals (Reay & Hinings, 2009). An institutional logic is not a formal strategy or plan; rather, it is often implicit

and taken-for-granted and does not need to be declared to influence how people think, feel and behave. For example, discussions of HRM systems have often contrasted high-performance versus high-commitment work systems, which fundamentally presume different institutional logics. At the level of economic systems, the institutional logic of capitalism is often contrasted with that of socialism. For business organizations pursuing sustainability, the established logic of profit maximization is altered to include concerns about environmental and social performance as equally legitimate to address (Connelly, Smith, Benson, & Saunders, 2012). However, because different norms, rules and values tend to be associated with the pursuit of financial versus social versus environmental performance (see Bansal & Song, 2017), businesses pursuing sustainability must find new ways to function within the context of multiple and distinctly different institutional logics.

2.1. HRM institutional entrepreneurship to promote sustainability (HIE-Sustain)

Actors with interests in particular institutional logics and capable of leveraging resources to create new logics or transform existing ones are called *institutional entrepreneurs*, while the term *institutional entrepreneurship* refers to the activities involved in a process of institutionalization out of which arise new values, beliefs, and routines that shape daily behavior in and around organizations (Maguire, Hardy, & Lawrence, 2004). Whereas early formulations of institutional theory emphasized the constraints that institutional logics place on actors, neoinstitutional theory recognizes that institutional entrepreneurs can exercise agency to achieve designed ends (Albertini & Muzzi, 2016; Garud & Hardy, 2007). They do so by reflecting on existing institutional constraints and then using and even changing them through their own actions (for a detailed discussion of these debates, see Cardinale, 2018).

To date, institutional entrepreneurship theory has primarily considered organizations as the instigators of divergent change within and across industries, but the theory can also be applied to change that occurs within organizations (Reay, Golden-Biddle, & GermAnn, 2006). At the level of organizations, institutional entrepreneurship involves disrupting and transforming the central values and common understandings that shape routines as they develop at organizational boundaries. At lower levels of analysis, entrepreneurial actions can be taken by groups as well as lone individuals. Of primary interest to us is HRM institutional entrepreneurship, which we define as the actions taken by HRM professionals acting as individuals or as a group to leverage resources such as their skills, knowledge and social capital as well as the organization's HRM system in order to change organizational norms, rules, routines and values. When HRM institutional entrepreneurship targets the objective of creating a balanced approach to managing social, environmental and economic performance, we refer to it as HRM institutional entrepreneurship for sustainability (HIE-Sustain).

Our discussion is informed by DiMaggio's (1988) arguments wherein he suggests that institutional entrepreneurship arises when institutional entrepreneurs see opportunity to realize an interest they value, leverage sufficient resources, and willfully participate in the change process. Two sources that contribute to opportunity identification are internal organizational conditions that facilitate the mobilization of resources and external conditions that allow the emergence of a rationale and questioning of the extant institutional logic (Barley & Tolbert, 1997). The domain of sustainability provides a focus for examining how the interplay of external pressures and internal organizational processes can create new opportunities for HRM professionals to enlarge and enrich their role, acting as institutional entrepreneurs in organizations striving towards sustainability.

Two central tasks for institutional entrepreneurs promoting sustainable development are (a) raising awareness about inconsistencies between the organization's current approach to managing human resources and the objective of sustainability, and (b) creating pressures that obligate relevant stakeholders to address the inconsistencies by creating, diffusing and stabilizing new routines (Child, Lu, & Tsai, 2007) consistent with sustainability. In this sense, understanding and managing "contradictory yet interrelated elements that exist simultaneously and persist over time", known as paradoxes (Smith & Lewis, 2011, p. 382), lay a foundation for HIE-Sustain.

2.2. Strategic HRM versus HRM for sustainability as competing HRM philosophies

Before detailing how HRM professionals can be proactive in creating, diffusing and stabilizing changes in the pursuit of sustainability, we first compare the institutional logics embedded in the alternative approaches to managing an organization's human resources. We refer to these broad approaches as HRM philosophies to convey that they are abstract ways of thinking about organizations that underlie and give rise to more specific HRM systems comprising of programs, policies, practices, and processes (cf., Jackson, Schuler, & Jiang, 2014; Schuler, 1992). HRM philosophies are a specific type of institutional logic concerning how the organization views and treats the workforce broadly construed.

As shown in Table 1, the dominant *strategic HRM philosophy* aligns with the traditional economic market model, which emphasizes the role of HRM systems as contributors to the economic performance of firms. Regarding the relationship between strategic HRM systems and economic outcomes, the evidence indicates that appropriately designed or targeted HRM systems can improve performance in specific performance domains such as customer service, product quality, customer satisfaction and teamwork. In this way, they satisfy specific stakeholders and contribute to a firm's economic success (e.g., Chang, Gong, Way, & Jia, 2013; Chuang, Jackson, & Jiang, 2016; Chuang & Liao, 2010; Hong, Liao, Hu, & Jiang, 2013).

Critics of the strategic HRM philosophy argue that it too often neglects or undervalues other priorities (Wilkinson, Hill, & Gollan, 2001), including an array of social and environmental concerns that are central to achieving sustainability. The emerging sustainability literature critiques the temptation for HRM professionals to accept and promote a dominant institutional logic that permits the exploitation of natural and human resource; it promotes an alternative new logic viewing HRM professionals and systems as responsible for renewing, regenerating and reproducing resources needed in the long term (Ehnert et al., 2014; Hahn, Figge, Pinkse, &

Table 1
Elements of institutional logics associated with alternative HRM philosophies.

	Strategic HRM Philosophy	Sustainable HRM Philosophy
Elements of Institutional Logic	Rooted in traditional capitalism and the economic market model of performance	Promotes transformed capitalism and the triple- bottom-line approach to performance
Locus of HRM responsibility	Own organization	Own organization, community, other organizations
Time perspective for HRM planning and evaluation	Shorter-term orientation	Longer-term orientation
HRM's dominant influence patterns	Top-down control	Top-down, bottom-up and outside-in influence
Within-organization coordination	Low to medium integration of HRM with business operations	High integration of HRM activities with business operations
Between-organization coordination	Low to medium interaction of HRM with external stakeholders	High interaction of HRM activities with external stakeholders
Degree of HRM agency	Reactive or responsive	Pro-active and perhaps activist
Role of HRM professionals and HRM system in creating change	Change agent focused on implementation	Institutional entrepreneur focused on initiating, guiding, and sustaining change
Connections among sustainability objectives	Environment and social issues as means to financial performance	Environmental, social and financial performance of equal importance

Preuss, 2018; Mariappanadar, 2019).

Guided by a strategic HRM philosophy, change agents focus on aligning an organization's HRM system with the organization's plans for how to achieve profitability. The timeframe tends to be comparatively short (3–5 years), and HRM professionals are presumed to be responsive to business problems identified by other managers (their business partners); they facilitate the search for solutions and help implement solutions, but they seldom set the direction for change (e.g., see Evans, 1999).

In contrast to the strategic HRM philosophy, the sustainability philosophy incorporates the "triple bottom line" approach to assessing an organization's effectiveness (World Commission on Environment and Development, 1987), which embraces the tensions inherent in simultaneously pursing economic, social and environmental performance objectives with the long-term goal of performing well in all three domains. Due to its broad reach, the sustainability philosophy is not appropriately referred to as an "HRM" philosophy, for sustainability requires significant changes across functional boundaries as well as across the organization's external boundary. Such extensive and often radical change requires persistent champions who give voice and support to counter-normative ideas from both internal and external stakeholders. Such championing can come from many parts of an organization, but because our focus is solely on institutional entrepreneurs whose duties fall within the HRM domain, we refer to the HRM for sustainability philosophy as an alternative to the strategic HRM philosophy.

Evidence of HRM scholars' considerable interest in shifting towards sustainability includes the Dutch HRM Network's 2017 conference theme of "Sustainable HRM"; the 2018 International Conference on "Sustainable HRM: Practices, Policies and Perspectives in South Asia"; books with titles such as Sustainability and Human Resource Management (Ehnert et al., 2014), Contemporary Developments in Green Human Resource Management Research: Towards Sustainability in Action? (Renwick, 2018), and Sustainable HRM (Mariappanadar, 2019); and the increasing number of conference papers and journal articles that use both "HRM" and "sustainability" as keywords.

Transformation of the HRM field seems to be underway, but it is far from complete. While HRM scholarship includes discussions of each of the three dimensions of sustainability, the work is fragmented and knowledge is accumulating within silos. For example, studies of strategic HRM may address some social elements (e.g., non-discrimination and fairness, employee health and safety, work design, engagement and job stress, and employment contracts) but it typically does so to understand their financial implications (e.g., job performance, job satisfaction and organizational commitment, De Roeck & Maon, 2018) while ignoring environmental concerns. On the other hand, the emerging specialty of "Green HRM" addresses environmental concerns (Ren et al., 2018) and often links these to financial performance, at least implicitly (see Norton, Parker, Zacher, & Ashkanasy, 2015), while staying mostly silent about social concerns. So while the primary interest in Green HRM is due to its potential to improve environmental performance, often such research is justified and legitimated by showing or arguing for its relevance to financial outcomes (Pinzone, Guerci, Lettieri, & Redman, 2016; Teixeira, Jabbour, & Jabbour, 2012; Wagner, 2011). Meanwhile, a growing HRM literature dealing with corporate social responsibility focuses on social concerns; it sometimes recognizes economic considerations but rarely deals with environmental concerns (e.g., see Voegtlin & Greenwood, 2016).

The splintering of social, environmental and economic interests is not unique to HRM scholarship; indeed, it is common among management scholars. When members of the Academy of Management decided that it was not ideal for those interested primarily in environmental issues to call the division titled Social Issues in Management (SIM) their home, they created a separate division dedicated to the study of Organizations and the Natural Environment (ONE). Today, each stream of inquiry is represented by its own specialized journals, and their separate agendas are evident in the curricula and research centers of many business schools. In an excellent analysis of how the literatures on corporate social responsibility and environmental sustainability began as separate and distinct areas of inquiry, Bansal and Song (2017) traced the bifurcation to the United Nations' Brundtland Report (often referred to as Our Common Future) and the United Nations Sustainable Development Goals. For example, Goal 8, which is to "Promote inclusive and sustainable economic growth, employment and decent work for all", is separate from Goal 10, which is to "Reduce inequality within and among countries", which is separate from Goal 13, which is to "Take urgent action to combat climate change and its impacts"

(United Nations, 2015). Implied by such a listing is that each goal can be pursued in isolation, even while recognizing that all of the goals are important at the aggregate level of human existence. In contrast, we argue that the tripartite nature of sustainability requires an approach that both recognizes the inherent tensions among the different goal domains while also providing an integrative roadmap to guide pursuit of the distinct goal domains. Next, we explain how paradox theory can serve as the basis for developing an approach that achieves this dual purpose.

3. Bridging institutional change and sustainability: a paradox lens

The concept of paradox fully captures the apparent contradictions embedded in the competing logics of economic versus social versus environmental performance (Putnam, Fairhurst, & Banghart, 2016). According to institutional theorists, an organization's dominant logic typically guides its members' behavior, yet multiple logics with different foundational values and beliefs often co-exist within an organization (Reay & Hinings, 2009). The co-existence of multiple logics that seem to be contradictory makes institutional change particularly difficult. In the case of shifting from a dominant logic grounded in profit maximization to the logic of sustainability, the challenge is to maintain elements of the economic logic while also embracing new values, policies and practices consistent with the logics of social and environmental performance. A paradox lens draws attention to the challenges and possible solutions for organizations as they attempt to reduce the influence of their current dominant logic to a new logic formed through hybridization of the contrasting logics. In this sense, the scope of HIE-Sustain is determined by the paradoxical tensions embedded in the co-existing logics associated with sustainability and the opportunities for change created by those tensions.

HRM scholars have done an excellent job in using paradox theory to identify the inherent tensions underlying sustainable HRM and offered potential responses. For example, Ehnert et al. (2014) identified several approaches for linking HRM with sustainability, including normative/ethical, efficiency-oriented, substance-oriented, or integrative. Cohen, Taylor, and Muller-Camen (2012) identified value-based, strategic and defensive approaches. Dahlmann and Grosvold (2017) contrasted the market versus environmental logics of institutional change for environmental management. Mariappanadar (2019) compared characteristics of control, strategic and sustainable HRM systems. Building on their contributions, we consolidate the multiple institutional logics along the categorization of paradoxes proposed by Smith and Lewis (2011): belonging, learning, performing and organizing. These four categories of paradox relate to the core organizing concerns of identity, knowledge, goals and processes, respectively (Smith & Lewis, 2011).

As shown in Table 2, we identified ten categories of paradoxical tensions that HRM institutional entrepreneurs manage for sustainability. The four primary categories are shown in the cells that fall along the diagonal of Table 2; six additional categories are added by considering situations in which two of the primary categories of paradoxes must be dealt with simultaneously due to the long time horizons and recursive nature of major change in an organization's institutional logic(s). We adopt the organization as the unit of analysis, while recognizing that larger collectives of organizations can potentially engage in HRM institutional entrepreneurship (see Doh, Tashman, & Benischke, 2018). Subsequently, we consider some of the individual-level implications for HRM professionals as they address these organization-level paradoxes.

HRM professionals operating in organizations that take a for-profit approach while also espousing their embrace of social and environmental responsibilities manage tensions that arise from the competing identities of employees, shareholders, environmental activists, NGOs and the general public; such tensions are known as *belonging paradoxes* (Smith & Lewis, 2011). Discussions about sustainability often include terms such as "fairness" or "justice" that have moral connotations, but because various stakeholders often disagree about what represents "fair" treatment of employees and "just" relationships with communities, HRM professionals encounter conflicts that surface as the organization strives to develop collaborative relationships. Assessing which stakeholders legitimately "belong" in discussions about priorities and decisions associated with sustainability and managing the influence permitted each stakeholder group are central to sustainable HRM debates (Ehnert, 2009). Belonging paradoxes can surface in industries such as fashion and entertainment, where prominent ambassadors espouse social sustainability concerns even as they promote products that pollute the environment and exploit cheap labor.

As divergent ideas challenge the established order, *learning paradoxes* arise from the tension between building new routines, structures and systems while simultaneously maintaining and leveraging practices that will eventually be discarded because they are incompatible (Kolk & Pinkse, 2008). HRM professionals are thus responsible for addressing the tensions between radical innovations that may be too disruptive or incremental innovations that may be insufficient for the magnitude of change required by sustainability. For example, learning paradoxes are evident in the agricultural sector where some businesses are transitioning to environmentally sustainable farming in order to offer products certified as "organic." To be economically viable, such businesses may find it necessary to charge higher prices even as they express commitment to serving low-income families. As they adopt new technologies to improve efficiencies and reduce production costs, they may lay off employees thereby contributing to unemployment in local communities.

In restructuring organizational units towards sustainability innovation, HRM professionals face contradictions between different parts of the organization, such as collaboration and competition, control and flexibility, and empowerment and direction, all under the category of *organizing paradoxes* (Smith & Lewis, 2011). Creating a separate unit that focuses on sustainability performance goals may be effective for the experimentation and innovation needed for sustainability, but may marginalize the sustainability work if it does not also address HRM implications for employees and the organization as a whole. HRM professionals hence deal with the tensions between managing tightly coupled structures to a set of loosely coupled activities to support collaboration. As businesses and entire industries restructure supply chains, HRM professionals may experience tensions associated with empowering employees in the core business while imposing centralized control over those working elsewhere in the supply chain.

Another category of tension HRM professionals encounter is termed performing paradoxes, which concern competing goals and

	ustainability.	
	s underlying sı	
	l logics	
	institutiona	
	inherent in	
Table 2	Paradoxes	

	,			
Type of Paradox Belonging	Belonging	Learning	Organizing	Performing
Belonging	Tensions related to who defines the normative values, to whom the values apply, and whose interests are served			
Learning	Tensions between the resistance to change for sustaining identity and the need for radical innovation	Tensions related to challenging the establish knowledge, norms and practices, and engaging new ideas		
Organizing	Tensions between the collective identity and the subfunctional groups formed with their own interests and processes	Tensions between deploying human resources and sustaining the human resources base	Tensions related to balancing the consumption and reproduction of resources	
Performing	Tensions between maintaining organizational pride and maximizing profits	Tensions related to competing for time and resources between learning and performing	Tensions related to balancing the consumption and reproduction of resources	Tensions related to competing goals and shortand long-term measures of performance

strategies (Smith & Lewis, 2011). Tensions between consequences that become evident in the short term versus those manifested in the longer-term often are at the heart of performing paradoxes (cf., Aguilera-Caracuel & Ortiz-de-Mandojana, 2013; Ehnert et al., 2014). For example, in the travel and tourism industries, HRM policies and practices aligned with a strategy that relies on increased travel to environmentally sensitive locales may be difficult to reconcile with espoused values of environmental and social responsibility.

Managing the tensions that arise when managing human resources for positive economic outcomes while also promoting employee well-being and recognizing the needs of families and the broader community has long been an accepted HRM responsibility (Jensen, Patel, & Messersmith, 2013). Less recognized and discussed is the fact that the four primary categories of paradoxes described above can co-exist, yielding six additional variations created at the interfaces of the different types of paradoxes, as shown in Table 2.

Role conflicts often intensify during institutional change that involves restructuring and new performance goals, making the interaction of belonging paradoxes with learning, organizing and performing paradoxes possible. For instance, when d.light, a multinational social enterprise, enters developing countries like China and India to provide solar-powered electricity to households without access to reliable electricity, it needs to change distribution channels from retailer-based to a broader model and decentralize management responsibilities by hiring local executives (Ozanne et al., 2016). So tensions between maintaining an identity and adapting to developing countries (belonging-organizing paradoxes) arise for HRM professionals to solve. Learning in the context of the unique challenges within China was motivated by a desire to enhance profitability rather than the organization's social mission, which sent mixed messages to employees and external stakeholders. Innovating for a change with the new distribution arrangements also disrupted self-conception and familiar routines of supply chain employees in the home country (belonging-learning paradoxes). As d.light strives to build a proactive, eco-oriented organizational identity with cutting-edge products that nurture and educate customers, such innovation is contradictory with its reputation for financial gains where a for-profit approach is used to guide business operation and HRM practices (belonging-performing paradoxes).

Sustainability reporting illustrates paradoxes at the intersections of learning with organizing and performing. Take learningperforming paradoxes, for example. HRM professionals are learning to manage activities and relationships that are no longer putatively inside the traditional boundaries of a firm. At the same time, they are learning these new roles, external stakeholders now monitor, shape and sometimes publicize their performance. As a consequence, new processes are needed to organize activities required in order to manage two co-existing reporting environments-one that is regulated and mandatory, and another that is voluntary or discretionary. The appropriate balance between compliance with regulations and voluntary transparency requires diagnosing the external context, establishing new performance goals and consulting with stakeholders in the value chain (Gardner, Benzie, Börner, et al., 2018). In addition, publically reported sustainability certifications and third-party audits offer ready information for consumers, investors, insurers, governments, and activists to leverage for influence (Crilly, Hansen, & Zollo, 2016). Advances in ubiquitous computing technologies mean that the reporting of the future will be digital, real-time, and dynamic (Global Reporting Initiative, 2015). So HRM professionals need to recognize tensions related to deploying human resources to enable future reporting of this nature and sustaining a healthy workforce free from distractions or disruptions caused by "always-on' connectivity in both work and home life (learning- organizing paradoxes). Sustainability reporting also increases the interdependence between a firm's workforce with other groups in its external environment, especially related to supply chain. There is a speculation that future reporting will become an integrated activity eventually, involving the focal organization and its suppliers, regional partners or sectorial partners (Global Reporting Initiative, 2015). Meanwhile, managing the dual regulatory and voluntary reporting regimes inevitably requires dealing with competing goals and differentiated strategies for the acquisition, consumption, and replenishment of resources among supply chain actors (organizing-performing paradoxes).

Responding to the range of paradoxes posed by the triple bottom line of sustainability expands the leadership roles of HRM professionals to include developing appealing arguments to gain acceptance from diverse stakeholders, questioning the dominant norms, finding connections to bridge existing and new practices, and legitimizing new practices among key stakeholders (c.f. Maguire et al., 2004; Phillips & Tracey, 2007). HRM professionals' activities also reach significantly beyond an organization's fuzzy external boundary, because sustainability principles require the involvement of an array of external stakeholders. We thus proceed to develop a framework of action that illustrates the contours of HRM institutional entrepreneurship for sustainability.

4. A framework for HRM institutional entrepreneurship to promote sustainability

Competing institutional logics create opportunities for agency and change, but are not by themselves an explanation for changes in institutional logics (Thornton & Ocasio, 2008). Institutional theorists have uncovered a number of strategies, actions and mechanisms used by institutional entrepreneurs who take advantage of opportunities to create fundamental change (Battilana et al., 2009). Although HRM professionals (or the HRM function in general) are seldom viewed as entrepreneurs, we argue that HRM institutional entrepreneurship can be central to improving the sustainability of business organizations. Fig. 1 summarizes a framework that provides a starting point for HRM professionals to embrace this role. In developing Fig. 1, we considered both the process and locus of institutional entrepreneurship.

Building upon entrepreneurship research that has identified the importance of opportunity recognition and entrepreneurial capabilities (Phillips & Tracey, 2007) and adopting Battilana et al.'s (2009) theory of institutional entrepreneurial action, our framework includes identifying opportunities, creating a new vision, leveraging resources, and re-institutionalization, with all of these activities taking place both within and outside the organization. Initially, individual agents can drive these activities, but ultimately, transforming the organization's HRM system to promote sustainability requires their instantiation as formal policies, practices,

Activities for HRM Institutional Entrepreneurs Promoting Sustainability						
Identifying Opportunities	Creating A New Vision	Leveraging Resources	Re-institutionalization			
Locus of Activities: Internal Organization						
Identify institutional contradictions and barriers Encourage bottom-up communication to elicit ideas for green initiatives Diagnose obligatory, encouraged and voluntary green behaviors Spotlight evidence showing benefits of positive green reputation., e. g., HRM metrics showing that job applicants respond positively to greener organizations Partner with line managers to help them improve their unit's performance against environmental concerns Identify executives with values consistent with moral and eco foundations of sustainability	Train executives and line managers for enhanced understanding of how sustainability can create competitive advantage Perhaps encourage turnover of some executives and managers to facilitate a vision creation Foster engagement and passion in the workforce Direct attention to potential awards, honors, and other recognition for organizations viewed as leaders in sustainability	Promote shared responsibility among the HR Triad Build alliances to reduce resistance to change Build trust to reduce cynical views of management's intentions Use total quality management principles to increase efficiencies due to greening of work processes Develop employees' green awareness, knowledge, skills Integrate sustainability as competency required for career advancement Integrate formal and self-leadership in fostering progress towards sustainability objective	Re-configure resource portfolio to enhance interdependencies Coordinate redesign/realignment of HRM system, management practices, and technologies Attract top talents dedicated to improved sustainability Foster spill-over between green behavior at home and at work Increase use of long-term sustainability objectives and evaluation criteria Integrate HRM institutional entrepreneurial activities into accepted role expectations Develop institutional entrepreneurship skills throughout the organization			
Locus of Activities: Between and Among Organizations						
Engage in discussions with social activists and arrange for them to make direct appeals to management Identify incompatibilities between firms' institutional logics and those of regulators, supply chain partners and consumers Participate in consortia with others in industry to speed up learning about HRM's role in environmental management Learn about sustainability values and interests of future employees through involvement with educational institutions	Collaborate with strategic partners, competitors and other organizations recognized as sustainability leaders Collaborate with external stakeholders to build agreement about norms and standards for environmental impacts of business activities Educate consumers and the community of the importance of using green products and services Collaborate with marketing experts to educate managers of the value of green initiatives	Engage with community to promote mutual gains due to environmental improvements Invite external stakeholders to supervise sustainability efforts and to reduce the risks of green-washing Build support of supply chain partners for agenda of mutual and complementary activities, e.g., shared recruitment and training for green talent	Establish monitoring and feedback processes to continuously improve sustainability performance Transfer learning to supply chain partners and assist with their change efforts, while continuing to learn from others Shift own focus to embrace serving as an industry leader			

Fig. 1. Framework for HRM institutional entrepreneurship for promoting sustainability, with examples emphasizing environmental concerns.

programs and processes. So here we also note competencies related to the less tangible and easily discerned elements of HRM systems (see Mariappanadar & Kramar, 2019 for a detailed discussion of individual competencies needed for people in various sustainable HRM roles).

To streamline this presentation, we assume that business leaders typically prioritize economic concerns over social or environmental concerns, and that most organizations recognize the need to address at least minimally some social concerns—e.g., those directly relevant to workforce management (see Ehnert et al., 2014). By comparison, many business leaders and, we believe, most HRM professionals, fail to embrace the need for their organizations to address environmental concerns. Therefore, when explaining the framework, we emphasize the environmental aspect of sustainability to promote research that has practical usefulness in an area that has received little attention from HRM scholars and practitioners. We are optimistic that improving environmental sustainability will be an objective of most businesses in the future. In addition, we assume that the shift to the institutional logic of sustainability is a multiplex, iterative and recursive process rather than a linear one. Some of sustainability's many elements may evolve in parallel over time before unification into a cohesive approach to sustainability, with each organization following its unique path.

4.1. Identifying opportunities

Identifying opportunities is a prerequisite condition for HRM institutional entrepreneurship as HRM professionals assess the likelihood and extent to which the belonging, learning, organizing and performing paradoxes, separately or collectively, provide openings for activities that introduce new logic legitimizing sustainability and enabling them to mobilize resources for change (cf. Dorado, 2005). Opportunity identification includes discovering and evaluating existing opportunities as well as creating conditions that facilitate the discovery or recognition of future opportunities (Ardichvili, Cardozo, & Ray, 2003). Thus, our consolidation of sustainability-related paradoxes provides a direction for HRM professionals' agentic actions in this stage, with performing paradoxes being particularly salient.

Within the organization, HRM professionals must identify contradictions between formal organizational values and employees' personal values, as doing so creates a condition for change. For instance, in creating a sustainability culture, Interface (a modular flooring company) used Denison's Organizational Culture Survey to measure how employees were connecting with the company's sustainability mission. Any signals of weak connections indicated opportunities and the need for institutional work. In organizations where sustainability is not a priority as in Interface, HRM professionals can look for signs where employees indicate their identification with environmentalism. The gaps between organizational and personal priorities provide opportunities for HRM professionals to promote and support voluntary green workplace behaviors, such as recycling, using public transportation, and drinking from reusable cups. Although such voluntary behaviors appear insignificant, cumulatively they can improve an organization's environmental performance (Yuriev, Boiral, Francoeur, & Paille, 2018) while also appealing to employees' self-regard. When the HRM system provides avenues for green-conscious employees to safely voice alternatives while also encouraging the home-to-work spillover of voluntary green behavior, it enhances the likelihood that organizational members who are at the periphery, less embedded, or more exposed to institutional contradictions can more easily identify opportunities for change (Seo & Creed, 2002).

At and beyond the organization's boundary, typically activists and NGOs have not directly interacted with business executives, or specifically with HRM professionals. However, recent trends indicate that social movements are now using direct appeals to management as a tactic to engage the business community (Reid & Toffel, 2009). HRM professionals can choose to help their organization resist such pressures. Or, they can spot and leverage such opportunities for effective collaboration and help shape an responses to such engagement efforts; they can actively participate in these social movements and help identify incompatibilities between their organization's institutional logic(s) and the demands of regulators, supply chain actors (e.g., suppliers and consumers), lobbying groups (e.g., NGOs, activists) and members of their organization. Such actions likely require prior knowledge, self-efficacy, resilience and diverse social networks, all of which an HRM system can promote among all of the organization's members, including its HRM professionals.

4.2. Creating a vision

To make the issues they value legitimate requires institutional entrepreneurs to craft a vision that appeals to those whose cooperation is needed to implement change (Battilana et al., 2009). When creating a new vision, HRM professionals face belonging paradoxes as they strive to develop and communicate the defining features of their organization's stance vis-à-vis sustainability issues. Conflicting logics are likely to create ambiguity and obscure employees' direct line of sight connecting their individual sustainability identities and that of the collective.

Vision is a key theme in both the organizational change and leadership literatures (e.g., By, 2005). For example, vision creation is among the key elements of successful change included in Kanter, Stein, and Jick's (1992) ten recommendations, Kotter's (1996) eight-stage process for organizational transformation, and Luecke's (2003) seven-steps for change. After reviewing these and other models for creating change, Stouten, Rousseau and De Cremer (in press) concluded that "research seems to concur as to the importance of vision to change management success" (p. 760), serving as a bridge from opportunity to action. Among leadership scholars, vision is instantiated by inspirational motivation where leaders articulate a compelling outlook, communicate optimism about future goal attainment, and provide meaning for the task at hand (Judge & Piccolo, 2004). The ultimate goal of creating a vision is encouraging a sense of organization-level meaning, enthusiasm and spirit so as to reduce resistance to change.

As shown in Fig. 1, the pursuit of sustainability involves vision creation both within and outside the organization. Within the organization, HRM professionals can provide compelling reasons to articulate a sustainability vision. However, in striving for influence in the creation and adoption of a new vision for the organization, HRM professionals are likely to face several challenges. Among the most significant challenges are lack of formal status and power, inhabiting a role viewed as marginal to business success, being expected primarily to reduce costs rather than develop human potential, and/or having little experience fomenting major organization change (Ren et al., 2018). In this context, the personal values of members of the top management team are especially important, for even when the locus of organizational change is elsewhere, success requires the visible support of the top management team (e.g., Darnall, 2006; Egri & Herman, 2000). Understanding how HRM systems can shape the sustainability values of top executives is a topic that has received little attention, however, even among scholars of so-called strategic HRM (Jackson et al., 2014; Leroy, Segers, van Dierendonck, & den Hartog, 2018).

Outside the organization, HRM professionals can collaborate with peers to establish collective processes for monitoring employees' perceptions of organizations' sustainability performance and establishing goals for improvement; they can work with unions and other employee representatives to create agreement around the need to find solutions that jointly and equally address all aspects of sustainability standards. As they work with community and educational leaders, as well as professional bodies (e.g. SHRM), to address social concerns, they can also be proactive in stimulating and facilitating discussions about the importance of using green

Human Resource Management Review xxx (xxxx) xxxx

products and services and express confidence to the general public that environmental goals will be achieved even as businesses ensure their own profitability.

4.3. Leveraging resources

Significant institutional change requires substantial resources in the forms of cognitive, social and material support. As they seek to leverage resources, HRM institutional entrepreneurs almost certainly must engage with organizing paradoxes as they assess the capacity of competing policies, practices and processes. Resources are needed to manage and reduce the risks and resistance associated with breaking away from current ways of doing business as well as those needed to effect desired changes. Resource leveraging often requires forming alliances and gaining support from all involved actors (Dorado, 2005). Alliances (a.k.a., coalitions) can expand the available resources for change and improve communication effectiveness when persuading others of the need for changes that might otherwise be resisted (Stouten et al., in press).

Within organizations, HRM professionals share responsibilities with managers and non-managerial employees for leading sustainability-oriented changes; all three players need participate actively. Traditionally, HRM professionals have had responsibility for designing formal policies, managers translated those policies into daily practices, and employees responded to the formal and informal cues they received. In the sustainability domain, however, the roles of all three of the so-called "HR Triad" (Jackson & Schuler, 2003; Jackson, Schuler, & Werner, 2017) are evolving. Recent conceptualizations of leadership recognize that any organization member can take on leadership roles (Day, 2014). This more expansive understanding of leadership has direct implications for the design of HRM systems, for it clarifies the importance of broad-based capacity building within networked relationships rather than focusing merely on the leadership competencies of individuals.

Outside the organization, HRM professionals can create and nurture relationships to foster organizations' engagement in community activities and multi-organizational collaboration. Organizations may express support for sustainability in general, but act inconsistently across the multiple domains. While accepting that businesses need to be profitable, and perhaps being personally committed to human rights and nondiscrimination, environmental issues might be viewed as largely irrelevant to many community groups or so contested as to forestall action (Shepherd, Patzelt, & Baron, 2013). To leverage the resources that might be available to a strong network of alliance partners, HRM institutional entrepreneurs must establish trust with those who have knowledge of and access to needed resources, and then collaborate with them to utilize each other's strengths to nurture and maintain support across the entire network. For instance, HRM professionals can organize the redistribution of surplus food from staff lunches and catered functions to not-for-profit organizations running community food programs, while simultaneously nurturing two-way conversations between employees and the community to encourage environmental moral exporting and peer persuasion (Maki & Raimi, 2017).

4.4. Re-institutionalization

Sustained change requires establishing new systems to ensure that the institutional logic of sustainability becomes taken-forgranted. Here performing paradoxes are particularly relevant because institutionalizing a new sustainability logic requires using new performance metrics that reflect the tripartite nature of sustainable development. The process of re-institutionalization is likely to be ongoing and continuous, occurring bit-by-bit with the achievement of "small wins" that contribute to an organizational culture supportive of pursuing improved sustainability. Organizational culture concerns meanings within the organization's boundary; it is a "complex set of values, beliefs, assumptions, and symbols that define the way in which a firm conducts its business" (Barney, 1986, p. 656). Because the domain of sustainability encompasses three dimensions of performance, an overarching organizational culture can create value by reducing the risk of conflict between subgroups that arise to promote their different views and priorities concerning economic, social and environmental issues. An organizational culture that embraces a unified tripartite view of sustainability may facilitate internal structural changes and the adoption of appropriate business processes and technologies, while also engaging a committed workforce.

In addition, HRM institutional entrepreneurs can build enthusiastic devotion and excitement for sustainability efforts beyond their organization's boundary. As shown in Fig. 1, the zenith of HRM institutional entrepreneurship is reached when the organization's HRM professionals shift from investing primarily in their own organization's learning and development to serving as leaders who facilitate change outside the organization. Such activities include making presentations and conducting workshops at professional meetings, serving on community governance boards involved in advocacy and policy making, as well as being proactive members of industry consortia that focus on sustainability issues.

An increasingly important yet underspecified new HRM responsibility is ensuring the transfer of learning to and among supply chain partners to improve their sustainability and assisting their change efforts. Navigating this new role, which is characterized by weak norms and fraught with conflicts of interest, challenges HRM professionals to simultaneously engage in their own job crafting while also leading the work of others. HRM institutional entrepreneurs both ask and help to answer questions such as "how can the inputs and outputs of organizational products and services be made sustainable?", "what are the limits to HRM systems in influencing the input and output process?", and "what new technologies can facilitate collaboration for green HRM throughout the green supply chain?" Interface, the company mentioned above, provides an example of how a manufacturer's rejection of its outsized environmental footprint led to changes that improved the sustainability of both its partners and competitors in the broader industry. To institutionalize the divergent changes and new institutional logics, the company's performance management, training and engagement schemes were modified to embed sustainability values in customer service worldwide. The innovative practices are proactively communicated by the company's chief sustainability officer in policy forums to connect with macro-level discourses, which

strengthens its capacity to legitimate and sustain the new industrial model.

5. Enacting hrm institutional entrepreneurship: required hrm competencies

Our proposed framework for understanding HRM institutional entrepreneurship describes the key phases of institutional change with a range of paradoxical tensions mapped within and beyond organizational boundaries. The multitude of sustainability-related paradoxes implicates a wide array of stakeholders relevant to institutional change. In this expanded arena, evaluating HRM effectiveness involves doing more than assessing the relationships between employees and employers to include evaluating the extent and effectiveness of complex interdependencies and coordination involving a wider set of internal and external individuals or groups (cf. Guerci & Shani, 2013; Jackson & Schuler, 2003). HRM professionals who promote sustainability will find themselves in unique and important positions as they work with stakeholders to enact HRM institutional entrepreneurship. It is beyond the scope of our paper to discuss all stakeholders with whom HRM professionals interact as they strive towards sustainability. For economy of discussion we focus on primary stakeholders who are engaged in formal, legitimate and explicit relationships with the organization (Mitchell, Agle, & Wood, 1997), namely suppliers, consumers, senior executives, line managers and non-managerial employees (Buysse & Verbeke, 2003; Guerci & Shani, 2013). Discussions of the competencies needed for effective HRM institutional entrepreneurship suggests practical recommendations for HRM systems to effectively manage sustainability-related paradoxical tensions. We note particularly new competencies required to address environmental issues, as they currently are often viewed as outside the HRM domain.

5.1. Working with external primary stakeholders

The broad range of external stakeholders who both influence and are influenced by an organization's sustainability activities means a new institutional logic to promote sustainability cannot evolve without engaging them. Here belonging paradoxes may become particularly salient because different stakeholders bring their own interpretation and expectations about whose interests are legitimately served by business organizations and the normative values business organizations should uphold. Supply chain partners are primary stakeholders who are critical to addressing environmental issues (Kim & Davis, 2016), but HRM scholarship rarely addresses stakeholder collaboration with them when it focuses on the economic and social domains of sustainability (Ren et al., 2018).

As the last link in the supply chain, consumers are exerting a major pressure on organizations, with research indicating that many prefer buying, even at a higher price, from organizations that care for the natural environment (Marquis, Jackson, & Li, 2015). Consumer pressure is intense in today's digital era when the consumers have quick and extensive access to information (and misinformation) about an organization's activities and their environmental impact. The market for sustainability-conscious consumers suggests a shared responsibility between organizations and consumers to protect the environment (Kotler, 2011), possibly through a model of consumer co-production (e.g. Bacile, Ye, & Swilley, 2014). HRM professionals can take a leading role in forging this partnership, for instance, by providing incentives to shift the R&D department's mindset from firm-controlled to consumer-contributed, and training the marketing department in communication strategies to engage customers.

Suppliers are another key external stakeholder group whose involvement is poorly specified in the HRM literature. That green suppliers are gatekeepers of environmentally-harmful input (Buysse & Verbeke, 2003) is straightforward. Less apparent are the predictable HRM implications for suppliers of an organization moving to improve their sustainability performance. For example, Arimura, Darnall, and Katayama (2011) showed that the adoption of environmental management systems certified to ISO14001 has a spill-over effect to suppliers, with 40% of facilities more likely to assess suppliers' environmental performance and 50% more likely to request suppliers' undertaking of environmental practices. As an example of this positive spill-over, Wal-Mart builds its truck fleet to be more fuel efficient, putting pressure on suppliers to make similar changes so as to reduce pollution (Kotler, 2011). Such large-scale changes to production and distribution systems involve major changes in the nature of employees' duties, working conditions, required skills, compensation, and so on.

5.2. Working with business executives

Effectively working with business executives is widely recognized as a key HRM competency, and it becomes particularly relevant when identifying opportunities and navigating the performance paradox of sustainability. The strategic management literature has reported on the role of key decision-makers' personal values and perceptions in sustainable development (Egri & Herman, 2000). For instance, pro-environmental values of business owner-managers are known to influence activities that relate to the natural environment (Agle, Mitchell, & Sonnenfeld, 1999; Shepherd et al., 2013). Likewise, CEO education and tenure may be reliable predictors of firms' voluntary disclosure of environmental information (Lewis, Walls, & Dowell, 2014).

CEOs and other top-level executives are faced with a new practical reality—they are now expected to engage in conversations about socially and technically complex topics, giving them as much attention as economic matters, as their performance is defined more broadly (e.g., see Rego, Pina e Cunha, & Polónia, 2017). Historically, the domains of sustainability have been associated with different areas of expertise and stakeholder groups: Economic concerns have been primarily the domain of financial experts with particular relevance to investors. Social concerns have been primarily the domain of HRM professionals and perhaps public relations experts with relevance mostly to employees and the community. Finally, environmental concerns have been primarily the domain of operations managers and perhaps health and safety experts with broader relevance to governments, consumers, and activists. Now, the daily work of many executives requires choosing how to proceed by considering their own environmental values, the firm's

Human Resource Management Review xxx (xxxx) xxxx

historical roots, the pressures emanating from stakeholders, and information about what other firms are doing. HRM professionals, as institutional entrepreneurs, can work with them to recognize opportunities created by competing objectives.

More specifically, HRM professionals can assist executives in nudging organizations towards better alignment with a wider range of stakeholders. It is now common for business consultants and nonprofit organizations to generate reports based on opinion and practice surveys that cover both social and environmental concerns under the monikers of sustainability, corporate responsibility, and governance (e.g., see Sustainability Reporting and Trends in 2025; The Conference Board's Sustainability Practices 2017; the 2017 Millennial Impact Report, the World Economic Forum's, 2017 Global Risk Report, and BCG's Total Societal Impact 2017 report, Boston Consulting Group, 2017). HRM professionals can use information from such reports to help executives identify the stakeholder groups that are most engaged with particular social or environmental issues and facilitate their involvement in strategic planning and implementation. Anticipation of such interactions with a more diverse set of stakeholders suggests that the organization's HRM system should include policies and practices to ensure executives have the competencies needed to interact effectively with diverse stakeholders; recruitment, selection, training, development, performance measurement, promotion processes and use of rewards are all tools for shaping the competencies required by executives in organizations pursuing sustainability.

The design and implementation of new metrics for evaluating progress towards sustainability is another task where business executives and HRM professionals can work together to manage tensions inherent in sustainable development. For example, there is a now a growing market for "responsible investing". Estimated to account for 25% of managed assets, interest in responsible investing has led to the creation of new metrics to guide investment decisions using information about firms' financial and social and environmental performance (Young, Shandal, & Burleigh, 2017). As business executives tackle these challenges, they will grapple with many of the same ambiguities and conflicting perspectives evident in the management literature. Their solutions will be evaluated as effective using metrics grounded in both scientific facts and value-based judgments. They will strive to both meet legally mandated standards and exceed the loftier expectations of customers, employees and other stakeholders. They will make decisions aimed at achieving short-term economic goals while, perhaps, recognizing that sometimes outstanding short-term economic performance is inconsistent with long-term environmental and social responsibility. Some executives will struggle with the thorny question of what is/should be the purpose of their businesses (c.f., Donaldson & Walsh, 2015; Hosmer, 1994). Perhaps a few business executives will radically reimagine the fundamental capitalist mindset and eschew the linear thinking and cause-effect assumptions upon which modern strategic planning is based, as some critical management scholars have recommended (see Banerjee, 2008; Ehrenfeld, 2011)—but to us that seems less likely. Whichever path they follow, business executives and HRM professionals with effective teamwork skills can work together to develop management practices that positively influence their organizations' environmental and social agendas, while also improving financial performance. Well-designed HRM systems can support the development and promotion of executives willing to engage in such collective action to achieve sustainability.

5.3. Working with line managers

HRM scholars and practitioners alike have acknowledged the role of line managers in implementing HRM systems, a phenomenon sometimes referred to as "HR devolution" through which HRM-related tasks and responsibilities are transferred to those who occupy intermediary management positions in the organizational hierarchy (López-Cotarelo, 2018). The organizational reality is that line managers often interpret and adapt HRM policies to suit their work contexts or personal interests (Evans, 2017). Thus, in navigating paradoxes related to organizing the allocation and production of resources, a key competency of HRM institutional entrepreneurs is ensuring that line managers are capable and motivated to think about how to address sustainability within the context of their own jobs, including implications for their own behaviors and their responsibilities as role models. Line managers' support and exemplary pro-environmental behaviors increase subordinates' pro-environmental behavioral intentions as well as actual behavior (see Blok, Wesselink, Studynka, & Kemp, 2015; Kim, Kim, Han, Jackson, & Ployhart, 2017). Together, HRM professionals and line managers can send a stronger message to employees when they identify with the same set of underlying assumptions and values (Leroy et al., 2018).

As institutional changes supporting sustainability solidify, HRM professionals can help ensure that line managers understand and accept the reasons for sustainability-related change. Co-determining employee attitudes and behaviors directed towards sustainability pushes line managers into roles that extend beyond their traditional functional roles, which may result in feelings of role overload. Role stress brought about by the insufficient time to complete HRM-related responsibilities is indeed a recurring theme in the HRM literature (Guilbert, De Winne, & Sels, 2011). Furthermore, the pursuit of sustainability objectives can substantially influence line managers' jobs and employment contracts, including revisions to how their performance is evaluated and how compensation is allocated (Berrone & Gomez-Mejia, 2009; Cordeiro & Sarkis, 2008). For example, new indicators might be used to assess their effectiveness in supporting and empowering those they supervise to feel committed to and engage in pro-environmental behaviors (Kitazawa & Sarkis, 2000). HRM professionals should involve line managers in the process of determining appropriate metrics and timetables for implementing such changes. In the process, line managers' sustainability mindsets may gradually change, creating a virtuous circle of positive influence on others.

5.4. Working with non-managerial employees

Non-managerial employees constitute an important yet under-valued source of learning paradoxes related to sustainability, as they can bring about bottom-up influence while also being subjected to top-down influences that are pervasive in business organizations. With the early management research on environmental sustainability strongly shaped by the strategic management approach, it is perhaps not surprising that much of the available empirical evidence reflects a top-down, management-driven approach

(e.g., Hart, 1995). A similar bias towards emphasizing top-down influence processes is evident in the growing literature addressing corporate social responsibility (Aguinis & Glavas, 2017). Likewise, the strategic HRM literature has viewed employees as rather passive recipients of HRM systems. We emphasize, however, that HRM professionals should recognize that non-managerial employees can engage in self-leadership and upward influence. Regardless of their status in an organization, employees throughout the organization shape, enact, and respond to elements of an HRM system; they may do unwittingly, but when they do so knowingly and by design, their behaviors are the essence of institutional entrepreneurship. Leveraging the energies of employees who are interested in promoting environmental sustainability can be particularly effective as peer-to-peer interactions are a major source of influence on employee behavior (Battilana & Casciaro, 2012). More generally, the value of empowering employees to engage in self-directed actions that facilitate desired changes is well-established (e.g., see Stouten et al., in press).

Employees vary considerably with respect to their behavior and interest in sustainability: some are unconcerned; some are concerned but show little consistency in their attitudes and behaviors as they move from one situation to the next; and some demonstrate high degrees of awareness, integrate sustainability into work and life, and meaningfully initiate changes for improvement (Sonenshein, DeCelles, & Dutton, 2014). This heterogeneity among employees suggests that HRM institutional entrepreneurs can be more effective by tailoring their intervention efforts to different segments of the workforce. Conventional HRM interventions—such as training to develop sustainability-relevant knowledge, skills and awareness—is often the first stage of HRM involvement (cf., Jabbour, 2013; Jabbour, Teixeira, Oliveira, & Soubihia, 2010) and such training may be especially effective for employees who do not personally identify with sustainability issues. For employees who have already been engaged in piecemeal attempts towards sustainability, early-stage sustainability training can help employees develop new mental models that enable understanding of the importance of sustainability. In addition, training interventions can clarify the organization's expectations for employee involvement in sustainability, thereby reducing role ambiguity. For genuine sustainability supporters, effective interventions can help supplement cognitive resources for moral awareness and integrity while providing opportunities that liberate dormant emotional and intellectual energy and increase employee engagement. Genuine sustainability supporters can become opinion leaders and influencers who champion change when they are equipped with the skills needed to act (Lam & Schaubroeck, 2000).

In addition to offering training to develop such skills, HRM professionals also should recognize that these same employees may experience feelings of self-doubt and thus benefit from additional reassurance and emotional support (Sonenshein et al., 2014), reinforcing their positive contributions to improved sustainability. For example, HRM professionals can support the inclusion of sustainability metrics as legitimate indicators of promotion potential and provide platforms to recognize the beneficial contributions of opinion leaders.

Research on the micro-foundations of change suggest that those who are the targets/recipients of change respond more positively when they are personally committed to it, feel a sense of personal control, perceive it as fair, and identify strongly with the organization, among other things (Stouten et al., in press). For the complex changes required to improve sustainability, creating all of these conditions for both managerial and non-managerial employees may be an unattainable goal. Thus, a major requirement for HRM professionals is developing an understanding of which of these conditions are most influential as facilitators and inhibitors of the types of fundamental change that a shift in institutional logics requires. Except in small organizations, such understanding is not likely to result primarily from direct interactions between HRM professionals and employees, but rather by information conveyed through various formal and informal communication channels. The HRM function can facilitate institutional change by building the organization's communication capabilities using tools such as hot lines, social media, performance management feedback processes, and so on. In addition to helping design such communication capabilities, which will increasingly involve the use of artificial intelligence systems and generate large quantities of quantitative and qualitative data, HRM professionals must have the relevant data analysis and interpretation skills to ensure the data are used effectively. Furthermore, with rising concerns about data privacy, HRM institutional entrepreneurs for sustainability will likely be called upon to help mediate the conflicting demands associated with decisions about what data to collect, from whom, and for what purposes. To do so effectively will require both negotiation skills and a moral philosophy that serves as a personal source of strength and guidance.

6. Implications for research and practice

As we have noted, our purpose has been to theorize an HRM change role that aligns with the institutional changes necessitated by the pursuit of sustainability. We have thus begun sketching foundational issues related to the nature and scope as well as actions and required competencies to support HRM institutional entrepreneurship for sustainability. Our HIE-Sustain framework suggests several new opportunities to advance scholarship and practice concerning HRM roles while also building stronger connections with theory and research in other management sub-fields and thereby contribute new insights concerning institutionalization processes, entrepreneurship, and managing paradox.

6.1. HIE-sustain role

Future research that investigates the dynamics of HIE-Sustain would more fully reveal how the HIE-Sustain role differs from the typical view of the HRM change agent role. The typical view positions HRM professionals as responsible for enacting the strategic vision of top-level executives by changing the behavior of individual employees to meet business needs. According to this view, the HRM system of policies and practices is the dominant change management tool. By contrast, we sketched an alternative view that positions HRM professionals as institutional entrepreneurs whose role includes taking responsibility for helping supplant the dominant logic of profit seeking with the three-prong logic of sustainability. So new routines and capabilities for managing the

paradoxical tensions that arise in the pursuit of multiple and often conflicting goals (cf., Felin, Foss, Heimeriks, & Madsen, 2012) are particularly salient to be further theorized and tested.

For strategic HRM scholars, our proposed framework generates opportunities for empirical research aimed at assessing linkages between HIE-Sustain and sustainability performance metrics. Implicit in the development of the sustainable HRM research domain is the assumption that organizations that fail to develop new approaches to managing the workforce will not effectively advance towards sustainability, as "decisions for or against sustainable business behavior will be made and implemented by people in organizations" (Ehnert, 2014, p. 248). But, perhaps there are conditions in which maintaining stability in an organization's current approach to workforce management is the better response. For example, adopting new technologies is one common method for improving environmental sustainability. Under some circumstances, an existing HRM approach built upon the dominant logic of strategic HRM might be effective for a firm that adopts a long-term perspective and legitimizes both social and economic concerns. If new technology helps an organization reduce its environmental impact and labor costs, it can free up resources for investments that improve the organization's financial performance while also improving workplace conditions and promoting engagement with the broader community. These alternative possibilities pose new questions to investigate concerning how different HRM approaches and philosophies might unfold and interact with specific organizational responses to sustainability pressures.

Insofar as improving sustainability relies on HRM institutional entrepreneurship that embraces and respects top-down, bottom-up, and outside-in influences, it presents new avenues for enacting the HIE-Sustain role. Although not explicitly labeled as such, both top-down and bottom-up dynamics are discernible in the strategic HRM literature; they are implicit in the two contrasting HRM systems referred to as control-oriented (top-down) and commitment-oriented (bottom-up) HRM systems. Recently, the assumption that these two forms of HRM policies are incongruent has been challenged; rather than choosing one approach or the other, the potential benefits and liabilities of both approaches can be realized when both types of policies are employed (e.g., Su, Wright, & Ulrich, 2018). Sustainable HRM creates opportunities for organizations, employees, senior managers, and external stakeholders to collaborate in their mutual pursuit of sustainability (Ehnert, 2009). So HRM professionals can be creative in translating environmental sustainability considerations into organizational members' daily attitudes, motivations and behaviors (e.g. Yuriev et al., 2018), and they can be proactive in creating conditions that facilitate the spill-over of sustainability behaviors between work to life at home, in schools, and throughout communities.

Another fruitful issue for future research is identifying organizational conditions—including organizational capabilities and structures as well as individual competencies—which, when present, improve the ease, acceptance, and/or speed of HIE-Sustain efforts. Organizations that have already developed the capability of dynamic ambidexterity, which involves simultaneously reconciling the conflict between using highly efficient management practices that emphasize compliance with established rules or regulations (i.e. exploitation) and adapting to change and exploring new possibilities (i.e. exploration) (March, 1991), may have in place an approach to workforce management that is effective for achieving sustainability goals. Such ambidexterity is consistent with the institutional logic of sustainable business where tensions inherent in the tripartite nature of sustainability are not traded-off, but dealt with simultaneously (Battilana & Dorado, 2010; Gibson & Birkinshaw, 2004). Indeed, sustainability research suggests that the most successful firms will be those that leverage potential synergies (Ortiz-de-Mandojana & Bansal, 2016).

6.2. Entrepreneurship

Future research can build upon existing understandings of how entrepreneurs (and intrapreneurs) initiate and sustain change that challenges dominant logics and promotes the development of new organizational capabilities. Management scholars have long been interested in entrepreneurship, and the field's accumulated knowledge base offers a starting point for the development of numerous testable ideas concerning HIE-Sustain. It is beyond the scope of this article to elaborate the many possibilities, but as an example of what such research might entail, interested readers can consult a recent study by Bingham, Howell, and Ott (2019), which analyzed six case studies to explore how the individual actions of managers lead to the development of organizational capabilities. Rather than describing the cognitive and financial resources available to managers, these authors identify the evolutionary processes beginning with the establishment of a few rules and processes that are sufficiently specific to guide early action and learning yet sufficiently malleable to allow revision until reaching consensus about the appropriate shape of new organizational routines. Central to this entrepreneurial change process is the appropriateness and effectiveness of communication, suggesting a condition that likely supports HRM institutional entrepreneurs' efforts to build an organization's sustainability.

Also at the intersection of HIE-Sustain and the entrepreneurship literature are the challenges brought about by globalization. The grand challenge of sustainability is global in scale and thus often requires boundary-spanning activities that cross national boundaries. Research on institutional entrepreneurship, a cross-disciplinary notion that emphasizes the discovery, evaluation and exploitation of international opportunities, has established the importance of social networks to enable perceptions and behaviors related to international opportunity identification (Andersson & Evers, 2015; Ellis, 2011). These social networks facilitate gaining important insights into the organization's environment and building trust with local partners. In this sense, networking capabilities of HRM institutional entrepreneurs might attenuate some of the risks that organizations face (such as those due to cultural, economic and institutional differences) as they forge international collaborations with supply chain actors in foreign countries. So future research could investigate how to build the networking competencies of HRM institutional entrepreneurs and how to leverage the HRM system to build organizational networking capabilities that facilitate the identification of opportunities for improving sustainability.

6.3. Changing institutional logics

Institutional theory contrasts sharply with the psychological theories that serve as the foundation for the field of HRM. In the context of HIE-Sustain, institutional theory offers insights about the conditions that enable or inhibit an organization's embrace of HRM professionals attempting to claim new responsibilities that fall outside the boundaries of their traditional domain. Such new responsibilities offer practical implications for HRM professionals to develop and manage sustainability-related activities involving external stakeholders and institute new processes to encourage transparent and successful upward influence from lower- to top-level employees. The enabling or inhibiting conditions also suggest specific areas that organizations might work on, including the individual attributes of HRM professionals; the structure, positioning and staffing of the HRM function; and the strength and sources of inertia within the organization.

A traditional or strategic approach that envisions using HRM policies and practices as the primary tools for managing multiple stakeholders will not be useful for guiding interactions with external stakeholders. More useful might be institutional theory's multilevel and multi-directional approach to understanding organizations-in-context, for it suggests how institutional change unfolds and how the constituents interact within and across different contexts. Ultimately, HIE-Sustain encompasses internal resource reconfiguration, multi-functional coordination and multi-organizational collaboration that in turn results in changes that characterize the legitimacy, power and urgency of the identified stakeholders. An emerging body of study examining the "microfoundations" of institutional processes (e.g. Felin et al., 2012) provides a basis for conducting meso-level research that integrates micro and macro approaches to the study of sustainability and recognizes that institutional entrepreneurship is a long, difficult and complex process.

Further investigating how HRM professionals act as institutional entrepreneurs can deepen our understanding of the sources of divergent change. Institutional theory suggests that the social position of would-be institutional entrepreneurs influences the likelihood they can effect change because social position influences access to resources and perceptions of the organization (Battilana et al., 2009). In some organizations, the formal position of HRM professionals may provide the legitimacy needed to gain access to the resources needed for some top-down initiatives. Meanwhile, research on bottom-up initiatives is necessary because the dual role of HRM professionals as employee advocates and management representatives (Tracey & Nathan, 2002) means their exposure to employee-initiated sustainability efforts may help them introduce sustainability logic at the top, where it might be unfamiliar.

New research is needed to improve our understanding of outside-in sustainability initiatives, also. HRM professionals' boundary-spanning activities offer opportunities to engage with multiple actors embedded in various institutional fields (e.g., NGOs, political groups, consumers) whose combined efforts nurture challenges to the existing dominant logic of business organizations. Such investigations could build upon knowledge gained from research on international staffing approaches, where an analogous problem must be resolved. Multinational companies must weigh the advantages and disadvantages of relying on expatriates from the head-quarters unit versus hiring local talent to staff subsidiary units (e.g., see Tarique, Briscoe, & Schuler, 2016). Likewise, sustainability requires weighing the advantages and disadvantages of investing in development of the company's internal talent against a staffing model that emphasizes development of talent in the external labor market. The former approach can provide excellent quality of work and life for fewer people (employees). However, over time, the latter approach may be more socially responsible as it improves work and life quality for a larger population and contributes more to building stronger local communities. Because sustainable business demands that organizations engage in community outreach, it points to the potential value of expanding the HRM role and function from building a company's internal human and social capital to also include building human and social capital in the larger community (cf., Lengnick-Hall, Lengnick-Hall, Neely & Bonner, in press).

6.4. Towards HRM ambidexterity

The challenge of finding solutions that balance the exploitation and development of an organization's internal and external labor markets is not unlike the challenge of balancing the use and extraction of natural resources with environmental conservation and replenishment. For both types of challenges, ambidexterity is likely to be a valuable organizational capability. As HIE-Sustain inevitably faces learning paradoxes to address the conflicting demands of exploration for knowledge renewal and exploitation of the existing knowledge base, ambidexterity is needed to exploit existing routines and structures while at the same time exploring possible new routines and structures.

Ambidexterity research (Gibson & Birkinshaw, 2004) has identified three strategies to conduct exploitation and exploration activities jointly, namely: separating them in time and switching between the two modes (temporal ambidexterity), separating organizational units with one unit focusing on exploitation and the other on exploration (structural ambidexterity), and reconfiguring individual behavioral capacity to simultaneously demonstrate them (contextual ambidexterity). Similarly, temporal and structural ambidexterity offer possible approaches for managing the HRM activities required for cooperation with the community, supply chain partners and other external stakeholders. Regarding temporal ambidexterity, interesting directions for new research include investigating the antecedents and consequences of alternative evolutionary paths travelled as businesses move from market-based logics to the logic of sustainability. Regarding structural ambidexterity, investigations might compare the effectiveness of structuring HRM activities around responsibility silos wherein separate units (e.g., separate functional groups) are held accountable for the three domains of sustainability versus structures that impose shared accountability for sustainability performance within all units and equally across all sustainability domains. At the micro level, research might be conducted to examine the question of whether a paradox mindset (Miron-Spektor, Ingram, Keller, Smith, & Lewis, 2017) is beneficial for HRM institutional entrepreneurs and other organizational members committed to improving business sustainability. And if a paradox mindset is found to be beneficial for sustainability, how can the HRM system be leveraged to build such a mindset?

7. Concluding remarks

As the foregoing discussion reveals, the challenges inherent in improving the sustainability of business organizations are substantial, requiring HRM professionals to be proactive and agentic—to expand beyond the traditional change agent role and embrace the role of HRM institutional entrepreneur. New theorizing and empirical investigations of HEI-Sustain are promising avenues for advancing our understanding of how HRM professionals and HRM systems can promote organizational effectiveness as measured against financial and social and environmental performance criteria, in unison.

At the level of organizations, we have emphasized the need for change aimed at institutionalization of the paradoxical logics associated with sustainable development. By implication, HRM scholarship that helps us reimagine the use of HRM systems as instruments for promoting such institutional change, including change stimulated by the actions of employees near the bottom of the organizational hierarchy as well as by the actions of organizational outsiders. As institutional entrepreneurs, HRM professionals can shape the awareness, decision making and actions of organizational members through their interactions with executives, middle level managers, and all other employees. Through boundary spanning activities, they can collaborate with a broad array of external stakeholders to shape the institutional logics of the broader context in which their organization is embedded. Last, but not least, the framework shown in Fig. 1 suggests that the knowledge, skills, abilities and resources required for HRM professionals to be effective institutional entrepreneurs are much more extensive than the usual combination of technical business knowledge and HRM-specific professional knowledge and experience (cf., Huselid, Jackson, & Schuler, 1997). The role enrichment associated with HRM institutional entrepreneurship may be more appealing to today's HRM scholars and practitioners as they seek work that aligns with their personal values and satisfies their aspirations for "doing good."

Funding

This research did not receive any specific grant from funding agencies in the public, commercial, or not-for-profit sectors.

Acknowledgements

The authors gratefully acknowledge the guest editor Jim Westerman and two anonymous reviewers for their constructive and insightful comments on earlier versions of this paper.

References

Agle, B. R., Mitchell, R. K., & Sonnenfeld, J. A. (1999). Who matters to CEOs? An investigation of stakeholder attributes and salience, corporate performance, and CEO values. *Academy of Management Journal*, 42, 507–525.

Aguilera-Caracuel, J., & Ortiz-de-Mandojana, N. (2013). Green innovation and financial performance. Organization & Environment, 26, 365–385.

Aguinis, H., & Glavas, A. (2017). On corporate social responsibility, sensemaking, and the search for meaningfulness through work. *Journal of Management*. https://doi.org/10.1177/0149206317691575.

Albertini, S., & Muzzi, C. (2016). Institutional entrepreneurship and organizational innovation: The start-up of a divergent new venture at the periphery of a mature field. The International Journal of Entrepreneurship and Innovation, 7(2), 110–119.

Andersson, S., & Evers, N. (2015). International opportunity recognition in international new ventures—a dynamic managerial capabilities perspective. *Journal of International Entrepreneurship*, 13, 260–276.

Ardichvili, A., Cardozo, R., & Ray, S. (2003). A theory of entrepreneurial opportunity identification and development. *Journal of Business Venturing*, 18, 105–123. Arimura, T. H., Darnall, N., & Katayama, H. (2011). Is ISO 14001 a gateway to more advanced voluntary action? The case of green supply chain management. *Journal of Environmental Economics and Management*, 61(2), 170–182.

Bacile, T. J., Ye, C., & Swilley, E. (2014). From firm-controlled to consumer-contributed: Consumer co-production of personal media marketing communication. Journal of Interactive Marketing, 28(2), 117–133.

Banerjee, S. B. (2008). Corporate social responsibility: The good, the bad and the ugly. Critical Sociology, 34, 51-79.

Bansal, P., & Song, H.-C. (2017). Similar but not the same: Differentiating corporate responsibility from sustainability. *Academy of Management Annals*, 11(1), 105–149. Barley, S. R., & Tolbert, P. S. (1997). Institutionalization and structuration: Studying the links between action and institution. *Organization Studies*, 18(1), 83–117. Barney, J. B. (1986). Can it be a source of sustained competitive advantage? *Academy of Management Review*, 11(3), 656–665.

Battilana, J., & Casciaro, T. (2012). Change agents, networks, and institutions: A contingency theory of organizational change. Academy of Management Journal, 55, 381–398.

Battilana, J., & Dorado, S. (2010). Building sustainable hybrid organizations: The case of commercial microfinance organizations. *Academy of Management Journal*, 53(6), 1419–1440.

astilana, J., Leca, B., & Boxenbaum, E. (2009). How actors change institutions: Towards a theory of institutional entrepreneurship. *Academy of Management Annals*, 3(1), 65–107.

Berrone, P., & Gomez-Mejia, L. R. (2009). Environmental performance and executive compensation: An integrated agency-institutional perspective. *Academy of Management Journal*, 52, 103–126.

Bingham, C., Howell, T., & Ott, T. (2019). Capability creation: Heuristics as microfoundations. Strategic Entrepreneurship Journal. https://doi.org/10.1002/sej.1312 (in press).

Blok, V., Wesselink, R., Studynka, O., & Kemp, R. G. M. (2015). Encouraging sustainability in the workplace: A survey on the pro-environmental behaviour of university employees. *Journal of Cleaner Production*, 106, 55–67.

Boston Consulting Group. Total societal impact: A new lens for strategy. (2017). From https://3blmedia.com/sites/www.3blmedia.com/files/other/BCG_Total_Societal_Impact.pdf (Accessed: June 15 2018).

Boudreau, J. W., & Ramstad, P. M. (2005). Talentship, talent segmentation, and sustainability: A new HR decision science paradigm for a new strategy definition. Human Resource Management, 44(2), 129–136.

Buysse, K., & Verbeke, A. (2003). Proactive environmental strategies: A stakeholder management perspective. Strategic Management Journal, 24(5), 453–470. By, R. T. (2005). Organisational change management: A critical review. Journal of Change Management, 5(4), 369–380.

Caldwell, R. (2003). The changing roles of personnel managers: Old ambiguities, new uncertainties. Journal of Management Studies, 40(4), 983–1004.

Cardinale, I. (2018). Beyond constraining and enabling: Toward new microfoundations for institutional theory. *Academy of Management Review, 43*(1), 132–155. Chang, S., Gong, Y., Way, S. A., & Jia, L. (2013). Flexibility-oriented HRM systems, absorptive capacity, and market responsiveness and firm innovativeness. *Journal of Management, 39*(7), 1924–1951.

Child, J., Lu, Y., & Tsai, T. (2007). Institutional entrepreneurship in building an environmental protection system for the People's Republic of China. Organization

Studies, 28(7), 1013-1034.

- Chuang, C. H., Jackson, S. E., & Jiang, Y. (2016). Can knowledge-intensive teamwork be managed? Examining the roles of HRM systems, leadership, and tacit knowledge. *Journal of Management*, 42(2), 524–554.
- Chuang, C. H., & Liao, H. (2010). Strategic human resource management in service context: Taking care of business by taking care of employees and customers. Personnel Psychology, 63, 153–196.
- Cohen, E., Taylor, S., & Muller-Camen, M. (2012). HRM's role in corporate social and environmental sustainability. (SHRM report).
- Connelly, J., Smith, G., Benson, D., & Saunders, C. (2012). Politics and the environment: From theory to practice (3rd ed.). London: Routledge.
- Cordeiro, J. J., & Sarkis, J. (2008). Does explicit contracting effectively link CEO compensation to environmental performance? *Business Strategy and the Environment*, 17(5), 304–317.
- Crilly, D., Hansen, M., & Zollo, M. (2016). The grammar of decoupling: A cognitive-linguistic perspective of firms' sustainability claims and stakeholders' interpretation. Academy of Management Journal, 59(2), 705–729.
- Dahlmann, F., & Grosvold, J. (2017). Environmental managers and institutional work: Reconciling tensions of competing institutional logics. *Business Ethics Quarterly*, 27(2), 263–291.
- Darnall, N. (2006). Why firms mandate ISO 14001 certification. Business & Society, 45(3), 354-381.
- Day, D. (2014). The Oxford handbook of leadership and organizations. New York: Oxford University Press.
- De Prins, P., Van Beirendonck, L., De Vos, A., & Segers, J. (2014). Sustainable HRM: Bridging theory and practice through the 'respect openness continuity (ROC)'-model. *Management Revue*, 25(4), 263–284.
- De Roeck, K., & Maon, F. (2018). Building the theoretical puzzle of employees' reactions to corporate social responsibility: An integrative conceptual framework and research agenda. *Journal of Business Ethics*, 149, 609–625.
- DiMaggio, P. J. (1988). Interest and agency in institutional theory. In L. Zucker (Ed.). Institutional patterns and organizations (pp. 3-22). Cambridge, MA: Ballinge.
- Doh, J. P., Tashman, P., & Benischke, M. (2018). Adapting to grand environmental challenges through collective entrepreneurship. Academy of management perspectiveshttps://doi.org/10.5465/amp.2017.0056 (in press).
- Donaldson, T., & Walsh, J. P. (2015). Toward a theory of business. Research in Organizational Behavior, 35, 181-207.
- Dorado, S. (2005). Institutional entrepreneurship, partaking, and convening. Organization Studies, 26(3), 385-414.
- Egri, C. P., & Herman, S. (2000). Leadership in the north American environmental sector: Values, leadership styles, and contexts of environmental leaders and their organizations. *Academy of Management Journal*, 43(4), 571–604.
- Ehnert, I. (2009). Sustainable human resource management: A conceptual and exploratory analysis from a paradox perspective. Heidelberg: Physica-Verlag.
- Ehnert, I. (2014). Paradox as a lens for theorizing sustainable HRM. In I. Ehnert, W. Harry, & K. J. Zink (Eds.). Sustainability and human resource management: Developing sustainable business organizations (pp. 247–271). Berlin: Springer.
- Ehnert, I., Harry, W., & Zink, K. J. (2014). Sustainability and HRM. Berlin: Springer.
- Ehrenfeld, R. (2011). In P. Bansal, & A. J. Hoffman (Eds.). The Oxford handbook of business and the natural environment (pp. 611–619). Oxford, UK: Oxford University Press Beyond the brave new world: Business for sustainability.
- Elkington, J. (1997). Cannibals with forks: The triple bottom line of 21st century business. Vancouver. Canada: New Society Publishers.
- Ellis, P. (2011). Social ties and international entrepreneurship: Opportunities and constraint affecting firm internationalization. *Journal of International Business Studies*, 42, 99–127.
- Evans, P. A. L. (1999). HRM on the edge: A duality perspective. Organization, 6(2), 325-338.
- Evans, S. (2017). HRM and front line managers: The influence of role stress. International Journal of Human Resource Management, 28(22), 3128-3148.
- Felin, T., Foss, N., Heimeriks, K. H., & Madsen, T. (2012). Microfoundations of routines and capabilities: Individuals, processes, and structure. *Journal of Management Studies*, 49(8), 1351–1374.
- Francis, H., & Sinclair, J. (2003). A processual analysis of HRM-based change. Organization, 10(4), 685-706.
- Gardner, T. A., Benzie, M., Börner, J., et al. (2018). Transparency and sustainability in global commodity supply chains. World Development. https://doi.org/10.1016/j.worlddev.2018.05.025.
- Garud, R., Hardy, C., & Maguire (2007). Institutional entrepreneurship as embedded agency: An introduction to the special issue. *Organization Studies*, 28(7), 957–969. George, G., Howard-Grenville, J., Joshi, A., & Tihanyi, L. (2016). Understanding and tackling societal grand challenges through management research. *Academy of Management Journal*, 59(6), 1880–1895.
- Gibson, C. B., & Birkinshaw, J. (2004). The antecedents, consequences and mediating role of organizational ambidexterity. Academy of Management Journal, 47, 200-222
- Global Reporting Initiative (2015). Sustainability and reporting trends in 2025: Preparing for the future. (The Netherlands).
- Guerci, M., & Shani, A. B. (2013). Moving toward stakeholder-based HRM: A perspective of Italian HR managers. *International Journal of Human Resource Management*, 24(6), 1130–1150.
- Guilbert, C., De Winne, S., & Sels, L. (2011). Antecedents of front-line managers' perceptions of HR role stressors. Personnel Review, 40, 549-569.
- Hahn, T., Figge, L., Pinkse, J., & Preuss, F. (2018). Cognitive frames in corporate sustainability: Managerial sensemaking with paradoxical and business case frames. Academy of Management Review, 39(4), 463–487.
- Hart, S. L. (1995). A natural-resource-based view of the firm. Academy of Management Review, 20, 986-1014.
- Hoffman, A. J. (1999). Institutional evolution and changes: Environmentalism and the US chemical industry. Academy of Management Journal, 42, 351–371.
- Hong, Y., Liao, H., Hu, J., & Jiang, K. (2013). Missing link in the service profit chain: A meta-analytic review of the antecedents, consequences, and moderators of service climate. *Journal of Applied Psychology*, 98(2), 237–267.
- Hosmer, L. T. (1994). Strategic planning as if ethics mattered. *Strategic Management Journal*, 15, 17–34.
- Huselid, M. A., Jackson, S. E., & Schuler, R. S. (1997). Technical and strategic human resource management effectiveness as determinants of firm performance. Academy of Management Journal, 40(1), 171–188.
- Jabbour, C. J. C. (2013). Environmental training in organizations: From a literature review to a framework for future research. Resources, Conservation and Recycling, 74, 144–155.
- Jabbour, C. J. C., Teixeira, A. A., Oliveira, J. H. C., & Soubihia, D. F. (2010). Managing environmental training in organizations: Theoretical review and proposal of a model. *Management of Environmental Quality: An International Journal*, 21(6), 830–844.
- Jackson, S. E., & Schuler, R. S. (2003). Managing human resources through strategic partnerships (8th ed.). Mason, OH: Thomson Southwestern.
- Jackson, S. E., Schuler, R. S., & Jiang, K. (2014). An aspirational framework for strategic human resource management. *The Academy of Management Annals, 8*(1), 1–56. Jackson, S. E., Schuler, R. S., & Werner, S. (2017). *Managing human resources. 12e.* Oxford: Oxford University Press.
- Jensen, J., Patel, P. C., & Messersmith, J. (2013). High-performance work systems and job control: Consequences for anxiety, role overload, and turnover intentions. Journal of Management, 39, 1699–1724.
- Judge, T. A., & Piccolo, R. F. (2004). Transformational and transactional leadership: A meta-analytic test of their relative validity. *Journal of Applied Psychology*, 89(5), 755–768.
- Kanter, R. M., Stein, B. A., & Jick, T. D. (1992). The challenge of organizational change. New York: The Free Press.
- Kim, A., Kim, Y., Han, K., Jackson, S. E., & Ployhart, R. E. (2017). Multilevel influences on voluntary workplace green behavior: Individual differences, leader behavior, and coworker advocacy. *Journal of Management*, 43(5), 1335–1358.
- Kim, Y., & Davis, G. F. (2016). Challenges for global supply chain sustainability: Evidence from conflict minerals reports. Academy of Management Journal, 59(6), 1896–1916.
- Kitazawa, S., & Sarkis, J. (2000). The relationship between ISO 14001 and continuous source reduction programs. *International Journal of Operations & Production Management*, 20(2), 225–248.
- Kolk, A., & Pinkse, J. (2008). A perspective on multinational enterprises and climate change: Learning from 'an inconvenient truth. *Journal of International Business Studies*, 39(8), 1359–1378.
- Kotler, P. (2011). Reinventing marketing to manage the environmental imperative. Journal of Marketing, 75, 132-135.
- Kotter, J. P. (1996). Leading change. Boston, MA: Harvard Business School Press.
- Kramar, R. (2013). Beyond strategic human resource management: Is sustainable human resource management the next approach? The International Journal of Human

Resource Management, 25(8), 1069-1089.

- Krippner, G. R. (2011). Capitalizing on crisis: The political origins of the rise of finance. Cambridge, MA: Harvard University Press.
- Lam, S. S. K., & Schaubroeck, J. (2000). A field experiment testing front line opinion leaders as change agents. Journal of Applied Psychology, 85, 987–995.
- Leroy, H., Segers, J., van Dierendonck, D., & den Hartog, D. (2018). Managing people in organizations: Integrating the study of HRM and leadership. *Human Resource Management Review*, 28(3), 249–257.
- Lewis, B. W., Walls, J. L., & Dowell, G. W. S. (2014). Difference in degrees: CEO characteristics and firm environmental disclosure. Strategic Management Journal, 35, 712–722.
- López-Cotarelo, L. (2018). Line managers and HRM: A managerial discretion perspective. Human Resource Management Journal, 28(2), 255-271.
- Luecke, R. (2003). Managing change and transition. Boston, MA: Harvard Business School Press.
- Maguire, S., Hardy, C., & Lawrence, T. B. (2004). Institutional entrepreneurship in emerging fields: HIV/AIDS treatment advocacy in Canada. Academy of Management Journal, 47, 657–679.
- Maki, A., & Raimi, K. T. (2017). Environmental peer persuasion: How moral exporting and belief superiority relate to efforts to influence others. *Journal of Environmental Psychology*, 49, 18–29.
- March, J. G. (1991). Exploration and exploitation in organizational learning. Organization Science, 2(1), 71-87.
- Mariappanadar, S. (2019). Sustainable human resource management. London: Red Globe Press.
- Mariappanadar, S., & Kramar, R. (2019). Sustainable HRM roles and competencies. In S. Mariappanadar (Ed.). Sustainable human resource management (pp. 275–306). London: Red Globe Press.
- Marquis, C., Jackson, S. E., & Li, Y. (2015). Building sustainable organizations in China. Management and Organization Review, 11(3), 427-440.
- Miron-Spektor, E., Ingram, A., Keller, J., Smith, W. K., & Lewis, M. W. (2017). Microfoundations of organizational paradox: The problem is how we think about the problem. *Academy of Management Journal*, 61(1), https://doi.org/10.5465/amj.2016.0594 available at.
- Mitchell, R. K., Agle, B. R., & Wood, D. J. (1997). Toward a theory of stakeholder identification and salience: Defining the principle of who and what really counts. Academy of Management Review, 42, 507–525.
- Norton, T. A., Parker, S. L., Zacher, H., & Ashkanasy, N. M. (2015). Employee green behavior: A theoretical framework, multilevel review, and future research agenda. Organization & Environment, 28, 103–125.
- Ortiz-de-Mandojana, N., & Bansal, P. (2016). The long-term benefits of organizational resilience through sustainable business practices. *Strategic Management Journal*, 37, 1615–1631.
- Ozanne, L. K., Phipps, M., Weaver, T., Carrington, M., Luchs, M., Catlin, J., ... Williams, J. (2016). Managing the tensions at the intersection of the triple bottom line: A paradox theory approach to sustainability management. *Journal of Public Policy & Marketing*, 35(2), 249–261.
- Phillips, N., & Tracey, P. (2007). Opportunity recognition, entrepreneurial capabilities and bricolage: Connecting institutional theory and entrepreneurship in strategic organization. Strategic Organization, 5(3), 313–320.
- Pinzone, M., Guerci, M., Lettieri, E., & Redman, T. (2016). Progressing in the change journey towards sustainability in healthcare: The role of 'green' HRM. *Journal of Cleaner Production*, 122, 201–211.
- Putnam, L. L., Fairhurst, G. T., & Banghart, S. (2016). Contradictions, dialectics, and paradoxes in organizations: A constitutive approach. *Academy of Management Annals*, 10, 65–171.
- Reay, T., Golden-Biddle, K., & GermAnn, K. (2006). Legitimizing a new role: Small wins and microprocesses of change. Academy of Management Journal, 49(5), 977–998
- Reay, T., & Hinings, C. R. (2009). Managing the rivalry of competing institutional logics. Organization Studies, 30(6), 629-652.
- Rego, A., Pina e Cunha, M., & Polónia, D. (2017). Corporate sustainability: A view from the top. Journal of Business Ethics, 143(1), 133-157.
- Reid, E. M., & Toffel, M. W. (2009). Responding to public and private politics: Corporate disclosure of climate change strategies. Strategic Management Journal, 30(11), 1157–1178
- Ren, S., Tang, G., & Jackson, S. E. (2018). Green human resource management research in emergence: A review and future directions. Asia Pacific Journal of Management, 35(3), 769–803.
- Renwick, D. W. S. (2018). Contemporary developments in green human resource management research: Towards sustainability in action? London: Routledge.
- Schuler, R. S. (1992). Strategic human resource management: Linking people with the needs of the business. Organizational Dynamics, 21, 19-32.
- Scott, W. R. (1987). The adolescence of institutional theory. Administrative Science Quarterly, 32(4), 493-511.
- Seo, M. G., & Creed, W. E. D. (2002). Institutional contradictions, praxis, and institutional change: A dialectical perspective. Academy of Management Review, 27(2), 222–247.
- Shepherd, D. A., Patzelt, H., & Baron, R. A. (2013). 'I care about nature, but...': Disengaging values in assessing opportunities that case harm. Academy of Management Journal, 56(5), 1251–1273.
- Smith, W. K., & Lewis, M. W. (2011). Towards a theory of paradox: A dynamic equilibrium model of organizing. *Academy of Management Review, 36*(2), 381–403. Sonenshein, S., DeCelles, K. A., & Dutton, J. E. (2014). It's not easy being green: The role of self-evaluations in explaining support of environmental issues. *Academy of Management Journal, 57*(1), 7–37.
- Storey, J. (1992). Developments in the Management of Human Resources. Oxford: Blackwell Publishing.
- Su, Z. X., Wright, P. M., & Ulrich, M. D. (2018). Going beyond the SHRM paradigm: Examining four approaches to governing employees. *Journal of Management*, 44(4), 1598–1619
- Tarique, I., Briscoe, D., & Schuler, R. S. (2016). International human resource management: Policies, and practices for international enterprises. NY: Routledge.
- Teixeira, A., Jabbour, C., & Jabbour, A. D. S. (2012). Relationship between green management and environmental training in companies located in Brazil: A theoretical framework and case studies. *International Journal of Production Economics*, 140, 318–329.
- Thornton, P. H., & Ocasio, W. (2008). Institutional logics. In R. Greenwood, C. Oliver, K. Sahlin, & R. Suddaby (Eds.). The sage handbook of organizational institutionalism (pp. 99–129). Thousand Okas, CA: Sage.
- Thornton, P. H., Ocasio, W., & Lounsbury, M. (2012). The institutional logics perspective: A new approach to culture, structure, and process. Oxford: Oxford University Press. Tolbert, P. S., & Zucker, L. G. (1996). The institutionalization of institutional theory. In S. Clegg, C. Hardy, & W. Nord (Eds.). Handbook of organization studies (pp. 175–190). London: SAGE.
- Tracey, J. B., & Nathan, A. E. (2002). The strategic and operational roles of human resources: An emerging model. *Cornell Hospitality Quarterly*, 43(4), 17–26. Ulrich. D. (1997). *Human resource champions*. Boston: Harvard Business School Press.
- United Nations (2015). Sustainable development goals. Department of Economic and Social AffairsNew York, NY: United Nations: Transforming our world: The 2030 agenda for sustainable development. Retrieved from https://sustainabledevelopment.un.org/sdgs.
- Van der Byl, C. A., & Slawinski, N. (2015). Embracing tensions in corporate sustainability: A review of research from win-wins and trade-offs to paradoxes and beyond. Organization & Environment, 28(1), 54–79.
- Voegtlin, C., & Greenwood, M. (2016). Corporate social responsibility and human resource management: A systematic review and conceptual analysis. *Human Resource Management Review*, 26, 181–197.
- Wagner, M. (2011). Environmental management activities and sustainable HRM in German manufacturing firms—Incidence, determinants, and outcomes. German Journal of Human Resource Management: Zeitschrift für Personalforschung, 25(2), 157–177.
- Wilkinson, A., Hill, M., & Gollan, P. J. (2001). The sustainability debate. International Journal of Operations & Production Management, 21(12), 1492–1502.
- World Commission on Environment and Development (1987). Report of the world commission on environment and development: Our common future. 41 (file:///C:/Users/Li/AppData/Local/Temp/our-common-future.pdf, Accessed Jan 7, 2017).
- World Economic Forum (2017). Global risks report 2017. Geneva: World Economic Forum. From. http://www3.weforum.org/docs/GRR17_Report_web.pdf (Accessed June 15, 2018).
- Young, S., Shandal, V., & Burleigh, S. (2017). How big investors can have a bigger societal impact. Boston: Boston Consulting Group.
- Yuriev, A., Boiral, O., Francoeur, V., & Paille, P. (2018). Overcoming the barriers to pro-environmental behaviors in the workplace: A systematic review. *Journal of Cleaner Production*, 182, 379–394.