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What on Earth Should Managers Learn About Corporate Sustainability? A Threshold Concept Approach

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Abstract

The Earth is facing pressing societal grand challenges that require urgent managerial action. Responsible management learning (RML) has emerged as a discipline to prepare managers to act as responsible leaders that can effectively address such pressing challenges. This article aims to extend current knowledge on RML in the domain of corporate sustainability (CS) through the application of threshold concepts, novel ideas which provide a doorway to new knowledge and transform a learner's mindset. Specifically, after conducting a systematic review of the management literature, we identify 33 CS threshold concepts that are useful for mainstream managers and practitioners in their RML process. We group them into six CS threshold concept themes that can help managers understand the complexities and interconnectedness that characterize CS. Finally, we map CS threshold concepts with key competences for effective RML. Therefore, our contribution relies on translating existing CS theoretical frameworks into transformative, specific, understandable and applicable pieces of knowledge that might help mainstream managers to embed CS principles in their daily management practices.

Keywords Corporate sustainability · Sustainability · Responsible management learning · Threshold concepts

Introduction

There is general agreement that managers must take responsibility for their actions (e.g., Nonet et al. 2016; Verkerk et al. 2001). Managing responsibly has become an urgent matter in recent years given the magnitude of societal grand challenges that threaten our planet. Given this scenario, responsible management has emerged with the aim of promoting managerial practices that integrate sustainability, responsibility, and ethics (Laasch and Conaway 2015; Rasche and Gilbert 2015;

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Setó-Pamies and Papaoikonomou 2016). The focus is on mainstream managers and their effort to manage responsibly (Laasch 2018a; Prahalad 2010; Schneider et al. 2010) across their different managerial tasks (Laasch and Conaway 2015).

Managing responsibly has attracted a great deal of attention in the context of education, especially since the United Nations released the six principles for responsible management education (PRME.org) to be implemented in higher education institutions with the aim of training business students to be responsible leaders. Since then, scholars and business leaders have encouraged educational reforms that integrate PRME (Nonet et al. 2016) and a substantial scholarly body of research has emerged under the umbrella of responsible management education (Moosmayer et al. 2018; Rasche and Gilbert 2015; Setó-Pamies and Papaoikonomou 2016; Waddock and Bodwell 2007). Despite these efforts, PRME has not significantly impacted practice to date (Hibbert and Cunliffe 2015; Hilliard 2013; Nonet et al. 2016). The main reason is that managing responsibly is complex and requires learning processes in the business context. Solving sustainability and ethical dilemmas requires reflective practice (Hibbert and Cunliffe 2015), practitioners' expertise (Schaltegger et al. 2013), a real-life challenges focus (Shrivastava et al. 2013), and a deep understanding of the particular organizational context where economic, environmental, and social forces operate (Ferraro et al. 2015).

Recently, scholars have called for a change of focus from responsible management education, somewhat divorced from managerial reality, to management learning in the workplace as a means to advance responsible management and close the bridge between academia and practice (Laasch 2018b). We have learned much about responsible management education practices and less about how mainstream managers, not just CSR or environmental managers, learn while performing their managerial functions in their work contexts (Armstrong and Fukami 2009; Benn et al. 2013; Ennals 2014; Hibbert and Cunliffe 2015; Laasch 2018a). Consequently, responsible management learning (RML) has emerged as a field of knowledge that aims to embed sustainability, responsibility and ethics into managerial practice (Laasch 2018b; Laasch and Moosmayer 2015a). Learning from both academic and managerial practices should be regarded as complementary components in the overall process of RML (Armstrong and Fukami 2009).

This study aims to help reconcile knowledge and practice of responsible management on corporate sustainability (CS)-environmental integrity, economic prosperity, and social responsibility (Bansal 2005)—by proposing the use of threshold concepts as an effective framework for RML. In their seminal work, Meyer and Land (2003, p. 1) proposed that in any discipline there are threshold concepts which are "akin to a portal, opening up a new and previously inaccessible way of thinking about something." They have the ability to lead the learner to a new realm of knowledge that implies a transformed way of understanding or interpreting something that has the potential to cause a significant shift in the personal and/or professional view of the subject which connects thinking and practicing (Davies and Mangan 2007). We build upon some recent studies that propose threshold concepts as an effective approach to engage learners more effectively in responsible behaviors (Hibbert and Cunliffe 2015; Vidal et al. 2015), proposing them as an effective way to open up valuable advances for mainstream managers to implement more sustainable responsible business practices.

First, the threshold concept framework might be the conduit to transform managers' mindsets towards responsible management since they have the potential to produce a significant shift in the personal and/or professional views of managers to develop an identity supportive of sustainable values. CS threshold concepts can help managers understand the scope of societal grand challenges and inspire action to solve them. As a preliminary explorative step of this study, in January of 2018 we approached twenty-five managers in different industries with a very straightforward request—"define CS". In line with previous studies (e.g., Rego et al. 2017), our findings revealed that although they agreed on the importance of CS, its meaning and its actual integration within business practices remain unclear. This lack of knowledge or clarity affects managerial attitudes and intentions to pursue CS (Wells and Nieuwenhuis 2017). Second, the urgency to mitigate societal grand challenges has led to the generation of new theories and knowledge in the academic world. Threshold concepts can help to translate new theoretical frameworks into actionable knowledge to ensure that practitioners and managers engage in responsible management practices. This is important because suitable knowledge for RML stems from sound research (Laasch and Moosmayer 2015b). Finally, the understanding of threshold concepts can help managers identify new ways of doing that can lead them to develop and implement more innovative and effective sustainable responsible business practices.

However, despite their potential to engage managers in responsible practices, and their traction in other fields (Wright and Hibbert 2015), threshold concepts are especially underdeveloped in the context of responsible management where they have "yet to significantly impact" (Hibbert and Cunliffe 2015, p. 180). In fact, to our knowledge, previous studies have not addressed CS learning using a threshold concept approach to improve practice. In this article, we aim to identify CS threshold concepts that are useful for managers and practitioners in their RML process, which can lead them toward a sustainable responsible mindset and real action. First, we identify relevant CS theoretical frameworks through a systematic research process. After careful analysis we extract CS threshold concepts derived from both well-established and new CS frameworks and articulate them as six CS threshold concept themes to help managers understand the complexities and interconnectedness that characterize CS (Schaltegger et al. 2013). Finally, we map CS threshold concepts to the three different competences for effective RML identified by Laasch and Moosmayer (2015b): education for sustainability, education for responsible leadership, and business ethics education. Therefore, our contribution relies on translating existing CS theoretical frameworks into transformative, specific, understandable and applicable pieces of knowledge that might help mainstream managers generate competences and action for responsible management. This serves as a boundary spanning connection between research and managerial practice. Building bridges between scholarly conversations on both well-established and new CS frameworks and creating actionable practical knowledge is crucial for an effective RML of managers that allows them to integrate CS principles in their management practices.

Background

Threshold Concepts Framework

In their seminal study, Meyer and Land (2003) proposed that in many disciplines there are threshold concepts, which provide a doorway to new knowledge and ideas that helps to transform the learner's mindset. Although the notion of threshold concepts was first developed in the field of education where it garnered much attention and enthusiasm (e.g., Meyer and Land 2005; Timmerman et al. 2013), it has also been applied in a myriad of different disciplines such as sports science, English literature, engineering (Irvine and Carmichael 2009), dental education (Hyde et al. 2018), health education (Barradell and Kennedy-Jones 2015), math (Scheja and Pettersson 2010), and economics (Davies and Mangan 2007). The threshold concept framework has gained traction due to its potential to have a transformative impact on the quality of the learners' experience in any given discipline (Wright and Hibbert 2015). They are an important factor in the design of an effective learning environment within a discipline since they have the potential to lead to profound conceptual change (Davies and Mangan 2007). Threshold concepts represent "a transformed way of understanding, or interpreting, or viewing something without which the learner cannot progress" (Meyer and Land 2003, p. 1). They help develop a way of thinking that has a practical outcome by reshaping an individual's identity within an academic discipline (Davies and Mangan 2007).

Meyer and Land (2003, p. 1) identified five core characteristics of threshold concepts: (1) transformative-they have the potential to create a significant shift in the personal and/or professional views of the subject; (2) irreversiblethe acquisition of knowledge is unlikely to be reversed, forgotten or ignored due to the deeper understanding of the topic a threshold concept creates; it is not possible to retreat to simpler understandings; (3) integrative-they can uncover the hidden interrelatedness of something and lead to new patterns of knowledge in the field of interest; (4) boundedthey help establish the boundaries of a particular area of knowledge and even the conceptual frontiers with other threshold concepts; and (5) troublesome-they may appear as counterintuitive, alien, or even incoherent for learners. According to the authors, these characteristics serve to distinguish between threshold concepts and core concepts. Core concepts, whilst important, do not take the learner into a new knowledge realm or rework prior knowledge, but rather are the foundation of a discipline that needs to be learned before building other knowledge layers.

Later studies extended our understanding of threshold concepts by suggesting that to have a transformative effect on the learning experience, the learner needs to develop a way of understanding the big picture (Land et al. 2005; Perkins 2006; Wright and Gilmore 2012). These studies point out that the utility of threshold concepts is constrained when not considered in conjunction with related educational ideas (Wright and Gilmore 2012). A deep understanding requires awareness of the "underlying game" (Perkins 2006)—termed as *threshold conception*- that "binds together aspects of a subject that may seem disparate for a novice" (Land et al. 2005, p. 4). These reflections are in line with earlier studies that argued that conceptual change operates at a more profound level through the acquisition of organizing schemas that can be associated with the development of disciplinary thought (Carey 1991; Entwistle and McCune 2001).

Some studies go a step further by suggesting that for the practice of a discipline, an understanding of the connections and interrelationships among the different threshold concepts is required (Barradell and Kennedy-Jones 2015; Davies and Mangan 2007; Vidal et al. 2015). Threshold concepts need to be understood as parts of a whole since the power of a threshold concept is only realized when it is used in conjunction with other threshold concepts (Davies and Mangan 2007). Students might understand individual threshold concepts but not be able to reach a deeper level of understanding that connects these concepts together into practice (Vidal et al. 2015). Specifically, Davies and Mangan (2007) extended the threshold concepts framework presenting the importance of thinking of threshold concepts in terms of a web of concepts linking knowledge and practice.

Threshold Concepts for RML on CS

Thresholds concepts are relatively underdeveloped in the management education literature (Wright and Hibbert 2015), especially in responsible management education (Vidal et al. 2015) and responsible management learning, where it "has yet to significantly impact" (Hibbert and Cunliffe 2015, p. 180). According to Meyer and Land (2003), the identification of threshold concepts is more challenging in disciplines where there is not a degree of consensus on what constitutes a body of knowledge. This is the case for CS, a field that is still evolving and where there is still ongoing debate on what falls under the CS umbrella (Antolin-Lopez et al. 2016; Montiel and Delgado-Ceballos 2014). In fact, new CS trends and frameworks are emerging in the literature which might have the potential to help managers learn how to implement sustainability practices effectively.

However, we believe that applying threshold concepts to RML in the domain of CS will allow mainstream managers and practitioners to develop and implement more sustainable responsible management practices. We need to comprehensively translate current and new CS theories and knowledge into a sound and actionable form so that they are of use to practitioners. To date, theories of responsible management have not significantly impacted practice (Hibbert and Cunliffe 2015; Hilliard 2013; Nonet et al. 2016), because of a gap between academic theories and the principles and motivations that drive real-world organizational practices (Hilliard 2013, p. 365). The research/academic-practice gap has also been widely recognized and frequently lamented by CS scholars (Bansal et al. 2012).

A few recent studies have suggested the use of threshold concepts as an approach that might engage students in an understanding of how managers and leaders can actively challenge irresponsible practices (Hibbert and Cunliffe 2015; Vidal et al. 2015). For example, Hibbert and Cunliffe (2015) theorize how moral reflexive practice drawing on threshold concepts leads to a transformative journey that offers a way to bridge the knowledge-practice gap in responsible management. The authors distinguish between self-reflexivity (questioning individual moral behaviors) and critical reflexivity (responsible organizational behavior). Vidal et al. (2015) propose that Business and Society courses contain ethics, corporate social responsibility and sustainability, and these concepts should be understood in unison since their interconnection constitutes a threshold conception. In this article, we extend and build upon these studies by applying the threshold concept framework to RML to identify CS threshold concepts that can lead mainstream managers and practitioners to a new way of thinking about CS. With the aim of leading them to the integration of sustainability principles in their daily management practices, we propose that threshold concepts can lead managers to develop a new mindset that represents a significant shift in their personal and/or professional views of CS and triggers actionable change in favor of more sustainable responsible management practices. We identify 33 threshold concepts and group them into six CS threshold concept themes that help managers to understand the complexities and interconnectedness that characterize CS and help them effectively apply CS principles in their daily practices.

Methods

Data Collection

The main objective of this study is to identify threshold concepts that are useful for RML in the domain of CS. For this reason, we needed to first identify CS theoretical frameworks that inform the field and later identify threshold concepts derived from them. According to Seth and Thomas (1994), each management theory provides a different perspective of the firm and consists of a logically consistent network of concepts. To our knowledge, Montiel and Delgado-Ceballos (2014) is the most recent literature review that takes stock of the literature on CS in terms of definitions and relevant management theories that have been used from 1995 to 2013. Therefore, we used their review as a basis to identify CS theoretical frameworks. However, as this article search ended in 2013 we decided to update it to explore and identify if new CS theoretical frameworks have been used by management scholars in the last 5 years.

We followed the guidelines of Tranfield et al. (2003) on how to perform a systematic review in management. This process started with setting the objective and conceptual boundaries of our research, which were the identification of articles that address CS from any theoretical framework in the management field from 2013 to present. After that, we proceeded with searching for articles. To identify CSrelated theoretical frameworks used by management scholars, we followed the search steps of previous systematic review articles on CS (e.g., Bansal and Gao 2006; Montiel and Delgado-Ceballos 2014). First, we searched in general management journals with tradition and traction in the field for quality and impact (c.f. Cohen 2006; Podsakoff et al. 2008) that are generally used as a basis for CS reviews (e.g., Bansal and Gao 2006; Grewatsch and Kleindienst 2017; Montiel 2008): Academy of Management J., Academy of Management Review, Administrative Science Quarterly, British J. of Management, J. of International Business Studies, J. of Management, J. of Management Studies, Management Science, Organization Science, Organization Studies, and Strategic Management J. In addition, we searched in organizational behavior journals that have been acknowledged as important outlets in previous CS reviews (e.g., Montiel 2008; Montiel and Delgado-Ceballos 2014): J. of Applied Psychology, Organizational Behavior and Human Decision Processes, J. of Organizational Behavior, and Personnel Psychology. Next, we searched in a set of journals considered to be important for academic research on the topic of CS (Grewatsch and Kleindienst 2017; Montiel and Delgado-Ceballos 2014): Business Ethics Quarterly, Business Strategy and the Environment; Business & Society, J. of Business Ethics, and Organization & Environment. Furthermore, we explored practitioner management journals listed in the Fortune Magazine list: Academy of Management Perspectives, California Management Review, Harvard Business Review, and MIT Sloan Management Review. Finally, due to our research objective, we also added specialized journals on management education to our search list: Academy of Management Learning and Education and J. of Management Education. Following the aforementioned review articles, we searched for keywords in the title or abstract: "sustainab*" (to ensure that the variations used in the CS field such as "sustainable development" "sustainable strategies", "business sustainability or "environmental sustainability" and "corporate sustainability" were captured), "social responsibility", "environmental strategy". Additionally, we added "responsible management" to the keywords list.

These search guidelines yielded a total of 1,183 outlets. Following previous literature reviews, we screened our sample to retain only articles, removing calls for papers or book reviews, which reduced our sample to 933 articles. Next, the three authors independently read the title, keywords, abstract and the introduction to retain articles addressing CS and excluded articles unrelated to the topic or outside the conceptual boundaries of this study. First, given our research objective, we only retained articles that addressed CS from a management perspective. The application of this inclusion criterion led us to discard those articles that addressed CS from a different perspective such as marketing, accounting, or environmental sciences (e.g., Harjoto et al. 2017; Steinmeier 2016; Theotokis and Manganari 2015). Although we acknowledge they might be relevant for practitioners, they were outside the scope of our search that consisted of identifying articles that use management theories to inform CS. The application of these criteria led us to reduce our sample to 890 articles. Finally, as our primary goal was identifying CS-related theoretical frameworks that are currently used by management scholars to inform the field, we excluded those articles with a more descriptive nature not rooted in specific theoretical frameworks (c.f. Snow and Thomas 1994). This criterion is line with previous CS reviews that have also found the existence of articles with no specific theoretical framework (fact-centered studies) (e.g., Montiel and Delgado-Ceballos 2014). After applying these criteria, the final number of articles we used is 664:140 from general management journals, 485 from specialized CS journals, 36 from practitioner journals, and 3 from management education journals.

In addition, as new theoretical frameworks are likely to first appear informally and take time to be discussed formally in research publications, we also supplemented our search of new CS theoretical frameworks by screening the Professional Development Workshops (PDWs) organized by the Organizations & Natural Environment (ONE) division of the Academy of Management in the past 5 years. The Academy of Management (AOM) is regarded as a preeminent professional association for management and organization scholars. As a result, AOM is considered a leading conference on general management and the biggest in terms of participants and sessions, which ensures the likelihood of covering new CS frameworks proposed by management scholars. We gathered a total of 116 CS-related PDWs. Most of them were co-sponsored by ONE and SIM (Social Issues in Management) divisions. We also screened the PDWs organized by SIM and we found no additional outlets.

Data Analysis

The data analysis started with the identification of the CS theoretical frameworks covered by the articles of our final sample. We performed different rounds of article reading and classification, around 40 articles per round, with a subsequent discussion where authors argued for their codification and identification of theoretical frameworks. To make sure we were consistent in our codifications, the two initial rounds contained 20 articles. The authors independently read

the abstract, introduction and discussion, and if needed, the entire article to identify CS theoretical frameworks and classify the articles accordingly. As a starting point, we relied on the list of CS theoretical frameworks identified by Montiel and Delgado-Ceballos (2014) as initial codes: institutional theory, stakeholder theory, and resource-based view. However, as we moved through the rounds, we found that there were articles that addressed a theoretical framework that did not fall under any of the aforementioned theoretical categories and we started to create additional categories. Specifically, we identified five additional CS theoretical frameworks (global system complexity, worldviews for sustainability, sustainability spatio-temporality, emotions in sustainability, and micro-foundations of CS) that we termed as new CS theoretical frameworks. We used the term "new" to emphasize that these theoretical frameworks do not already fall under pre-established categories. They are new in the sense of gaining popularity in management, although some had already gained traction in other fields.

Once we had classified the articles by CS theoretical frameworks, we proceeded with the identification of threshold concepts derived from each of them that are relevant for RML in the domain of CS. We followed the guidelines of two recent studies that provide recommendations on how to identify threshold concepts (Barradell 2013; Tucker 2016). Specifically, we first tried to see if the concepts identified as potential threshold concepts might lead to transformative learning, that is, if they could lead to an" a-ha moment" for managers. In doing so, we used the five characteristics of threshold concepts: transformative, irreversible, integrative, bounded and troublesome (Meyer and Land 2003). We did not use any software because the identification of threshold concepts cannot be made using specific words or codes. Interpretation was required to see if there are concepts with the potential to lead the learner to a transformative learning experience and analysis of whether they met the intrinsic characteristics of a threshold concept (Tucker 2016).

We started to codify the articles in our sample previously classified as using institutional theory, and then we continued on to stakeholder theory articles, and so on. We performed several rounds of discussion for each CS theoretical framework where we shared our results and thoughts, refined ideas, and solved potential discrepancies. In general, we conducted from two to four rounds for each CS theoretical framework. In the first round of each CS theoretical framework, we showed our list of threshold concepts and discussed if they had the characteristics of thresholds concepts. After that, we revisited the articles to refine the identified threshold concepts and discussed our list of threshold concepts again in a second round. We repeated this procedure until agreement was achieved. Specifically, we propose 13 threshold concepts associated with pre-established theoretical frameworks, and 20 threshold concepts resulting from new theoretical frameworks.

In addition, in the process of identifying and refining the threshold concepts we found that there were strong connections between them, as some of them were woven together representing a deeper conceptual theme. Thus, we started to group them into CS threshold concepts themes following the steps of Tucker (2016). Specifically, we found that the 33 threshold concepts coalesced in six CS threshold concept themes: (1) Emotional agency, (2) Stakeholder dynamics, (3) Evolving value creation, (4) Ecological connection, (5) Altruism pitfalls, and (6) Management reinvention.

Finally, in order to provide some guidance on the learning potential of each threshold concept we linked each to the three established competences of RML (Laasch and Moosmayer 2015b): sustainability learning, responsible leadership, and business ethics (see Table 3). The authors engaged in several coding rounds to identify the appropriate RML competences addressed by each of the 33 threshold concepts, identifying several that addressed more than one competence. Our mapping is a first approximation of the relevant competences engaged by each threshold concept from our perspective as management educators. These competences can serve as an exercise after moral reflexive practice (see Hibbert and Cunliffe 2015), where managers are challenged to report back on which competence they acquired. Therefore, the RML competences are most useful as a framework for managers to classify their own learning, rather than relying on the mapping we provide in Table 3.

Validation

We conducted validation tests that helped us to refine our threshold concepts list. First, the various discussion rounds where we compared our codes, classifications and interpretations served as an initial validation test. Second, as we developed our threshold concepts list, we used our academic networks to challenge and refine our findings. Finally, the authors ran a CS workshop with senior managers who were alumni of a prestigious Colombian business school that was hosting a Sustainability Symposium. We took it as an opportunity to present our six CS threshold concept themes and highlight a few of our threshold concepts in detail with managers from national and multinational corporations representing a variety of industries. The 15 attendees were surveyed at the end of the workshop, and there was unanimous agreement that designing RML opportunities around these threshold concept themes was valuable. Despite some interesting perspective issues (the pollution haven threshold concept has a different meaning for managers in a country that is the target of pollution versus for US managers that are outsourcing pollution), the managers quickly grasped the utility of moral reflexive practice around these threshold concepts and in their own comments regularly made specific links between threshold concepts and the sustainability, responsibility and ethics competences of RML. Overall, their reactions and feedback helped us to describe our threshold concepts and interactions in a more helpful language for managers and provided some external validation.

Established Organizational Theories and Corporate Sustainability

Our systematic review process identified the most prevalent CS theories and frameworks that have been utilized in recent academic literature. We classify our findings into two main categories: established organizational theories and new frameworks for corporate sustainability. We are able to identify relevant threshold concepts for managers from both the theories and frameworks. In fact, we find they complement each other and provide a more holistic approach to understand CS ideas and translate these into effective threshold concepts for RML (Table 1).

Institutional Theory

In our coding of recent CS scholarship, we found that institutional theory remains a popular theoretical lens for exploring sustainability phenomena, representing 96 articles in our final sample. Institutional theory focuses on the role of institutional pressures in shaping the decisions made by managers and firm leadership (DiMaggio and Powell 1983). Early corporate responses to environmental and social challenges were often triggered by government regulation; therefore, coercive isomorphism featured prominently in early CS research. However, as CS phenomena have evolved to include voluntary and strategic engagement (Sharma and Vredenburg 1998), the full gamut of normative, coercive, and mimetic isomorphic pressures (DiMaggio and Powell 1983) became relevant to these studies.

The concepts emerging from institutional theory studies in CS are relevant to RML because they can help managers understand the complex web of external pressures that shape decision making. Historically, sustainability reporting has featured prominently in institutional theory studies of practice and standards adoption (Etzion and Ferraro 2010). This literature can help managers identify the pitfalls leading to the adoption of ineffective practices or to failure to adopt efficient practices. Beyond understanding the influences of mimetic, coercive and normative isomorphism, the literature in institutional theory has generated a number of interesting and managerially relevant concepts, and our review of the last 5 years suggests that there is a number of emerging threshold concepts important for RML.

Table 1 Organizational theories and corporate sustainability

| Approaches to Corporate Sustainability | Theory | Threshold Concepts |
|--|--|---|
| CS practices (Raffaelli and Glynn, 2014) and standards adoption (Husted, et al., 2016b; Richards et al., 2017) | | 1. Moral Legitimizing (Richards et al., 2017) |
| Interactions with government and political institutions (Luo et al., 2017; Zhang et al., 2016) | Institutional Theory | Disruption-linked Contagion (Briscoe et al., 2015) Means-ends Decoupling (Wijen, 2014) |
| Decoupling (Hawn and Ioannou, 2016; Marquis and Qian, 2014; Wijen, 2014) | 96 articles | 4. Pollution Haven (Li and Zhou, 2017; Surroca et al., 2013) |
| Stakeholder engagement (Dögl and Behnam, 2015; Bhattacharyya and Cummings, 2015) Prospective employees (Burbano, 2016; Jones et al., 2014) Employees (Carnahan et al., 2017; El Akremi et al., 2018) Stakeholder influence on CS outcomes CFP (Oikonomou et al. 2014) CSR/CFP (Madsen and Rodgers, 2015; Servaes and Tamayo 2013) Decoupling (Crilly et al., 2016; Eun-Hee and Lyon, 2015) Irresponsibility (Ormiston and Wong, 2013; Tang et al., 2015) | Stakeholder Theory 155 articles | 5. CSP Consistency (Wang and Choi, 2013) 6. Product Sustainability Performance Negativity Bias (Jayachandran et al., 2013) 7. Dynamic Stakeholder Salience (Brower and Mahajan, 2013; Eun-Hee and Lyon, 2015) 8. CSR Enabled CSiR (Ormiston and Wong, 2013) |
| Natural Resource Based View (NRBV) (Hart, 1995) Environmental Capabilities, Environmental CSR as a Resource generator (Flammer, 2013) Dynamic Capabilities (Aragon-Correa and Sharma, 2003) | Resource-Based View of the firm 12 articles | 9. Time and Stock Dampening (Flammer, 2013) 10. Bi-directional Environmental Capability Transfer (Berchicci et al., 2017) 11. Context Specific Micro-Foundations (Strauss et al., 2016) 12. CS as Insurance (Flammer, 2013; Shiu and Yang, 2017) 13. Innovation in Resource Depleted Markets (Haanaes et al., 2013) |

 Natural Resource Based View (NRBV) (Hart, 1995)

 Environmental Capabilities, Environmental CSR as a Resource generator (Flammer, 2013)

 Dynamic Capabilities (Aragon-Correa and Sharma, 2003)

 Three principle areas of inquiry were identified in our literature review, including the adoption of CS practices and standards (Husted et al. 2016b; Raffaelli and Glynn 2014; Richards et al. 2017), the role of political institutions in the practice and quality of CS behaviors (Luo et al. 2017; Zhang et al. 2016), and sustainability decoupling (Hawn and Ioannou 2016; Marquis and Qian 2014; Wijen 2014). In the area of practice adoption, research focused on firm activities such as days of service or employee volunteerism (Raffaelli and Glynn 2014). Studies of standards adoption included
 Institution

nou 2016; Marquis and Qian 2014; Wijen 2014). In the area of practice adoption, research focused on firm activities such as days of service or employee volunteerism (Raffaelli and Glynn 2014). Studies of standards adoption included international certifications such as ISO 14001 (Husted et al. 2016a) and industry specific certifications in agricultural markets (Richards et al. 2017). Regarding the second area, political studies focused on the impact of managerial political ties (Zhang et al. 2016), government dependency and monitoring (Marquis and Qian 2014), and governmental institutional complexity (Luo et al. 2017) on the propensity of CSR reporting quality and substantive implementation. Sustainability reporting ("CS reporting" onward) remained an important measure in our third area, including research into the decoupling present in CS reporting: whether reports represented symbolic gestures or substantive commitment to CS (Marquis and Qian 2014). Some studies advanced the investigation of decoupling phenomena by focusing on the degree of decoupling, the gap between external and internal CSR actions and its impact on market value (Hawn and Ioannou 2016). Other studies advanced decoupling by moving further along the chain of causality to study the decoupling of the implementation of substantive CS activities and the subsequent achievement of CS-related goals, referred to as "means-ends decoupling" (Wijen 2014). This means-ends decoupling identified a tension between isomorphic pressures and the role of innovative firm activities vital for CS performance (Wijen 2014).

Institutional Theory Threshold Concepts

In the area of CS standards adoption, we identified *Moral Legitimizing* as a distinct threshold concept. A study of the coffee, tea and chocolate industries found that the ways that firms legitimize themselves on moral grounds predicted sustainable certification adoption (Richards et al. 2017). Specifically, the study relied on identity orientations from French Pragmatist Sociology and determined that moral legitimizing based on "civic and green" worlds (civic duty and respect for nature) were more likely to implement sustainability certifications than those based on "domestic" worlds (traditions and family values). As a threshold concept, Moral Legitimizing challenges managers to explore and interpret the foundations of their firm's legitimacy claims and how these may impact the propensity to engage in CS behaviors and responsible management practice.

Another study into the adoption of social responsibility practices helped identify a new threshold concept we label *Disruption-linked Contagion*, which goes beyond the traditional ideas of mimetic, coercive, and normative isomorphism in institutional theory. Briscoe et al. (2015) studied the adoption of a specific supplier-sanction practice and found that contagion of the practice to other firms was limited if the initial adoption was in response to activists' protests as opposed to when activists used evidenced-based tactics to convince organizations to adopt. This idea is a challenging concept for managers since it goes beyond the influence of peers' adoption practices. Disruption-linked contagion challenges managers to consider the influence of activists on peers' adoption practices, and how activists' tactics may lead to disregarding certain CS practices despite their potential value to the firm.

Two more threshold concepts were identified in the institutional theory literature, and these emerged in studies of decoupling and irresponsible management practice. Wijen (2014) conceptualizes the adoption of institutional practices in highly opaque fields and concludes that Meansends Decoupling occurs when institutional entrepreneurs create strong rules and incentives for practice compliance. Therefore, the firms in these institutional environments may substantively adopt sustainability standards but said standards and practices do not result in the desired sustainability outcomes because they can only be achieved through innovation (Wijen 2014). This new concept of *Means-ends* Decoupling will help managers to understand that CS performance cannot be achieved by following simple guidelines or instructions. Adoption of new practices should include understanding of the sustainability goals of said practices and allow for managerial agency in adjusting practices to ensure that goals are achieved in the particular context of the firm's operations.

The final threshold concept identified from this literature involved a study that tested the existence of the pollution haven hypothesis (Li and Zhou 2017). In a study of 18,000 manufacturing facilities over a nearly 20-year period, it was found that U.S. plants released fewer toxic emissions when the parent company imported more from low-wage countries (LWC) and that more of these imports were in pollutionintensive industries (Li and Zhou 2017). These findings provide evidence of the Pollution Haven threshold concept, which identifies that firms can respond to institutional pressures for responsible management practices by offshoring or transferring their irresponsible management practices to countries with weaker institutional pressures. This is a particularly disturbing concept for managers, as they may discover that previous CS efforts have simply resulted in shifting social and environmental burdens to underprivileged communities (Surroca et al. 2013) rather than actually creating solutions. However, learning about this threshold concept will be invaluable in helping managers to assess the

efficacy of CS practices and motivate responsible management practice.

Stakeholder Theory

In our research sample we found that stakeholder theory represented 155 articles of the final 664 studies sampled. This theory's introduction of multiple stakeholder groups (NGOs, communities, consumers, government, etc.) above and beyond the traditional financial shareholders of the firm explains its popularity with research that studies the phenomenon of extra-financial organizational activities (Freeman 1984; Harrison and Freeman 1999). An appreciation of stakeholder theory is essential to RML because mangers must learn that multiple and conflicting stakeholders will play a role in defining exactly what responsible management is. While individual studies still focus on at most one or two stakeholder groups, rather than study the interaction and engagement of multiple disparate stakeholders as encouraged in the theory's development (Freeman 1984), the literature as a whole provides a number of insights and findings that are important lessons for managers focused on responsible management. The importance of identifying marginalized stakeholders (Hart and Sharma 2004), which often suffer the negative externalities of management decisions (air pollution, animal extinction, obesity), is an example of such an insight. Overall, the theory helps in identifying and engaging stakeholders that impact a firm's potential to achieve CS, and therefore exhibits tremendous potential to contribute to RML.

We identified three substreams in our sample of recent CS stakeholder theory research: stakeholder engagement, stakeholder influence and irresponsible management. Stakeholder engagement studies focused both on existing employees and prospective employees. Findings included a positive relationship between CS and employee satisfaction and engagement (Carnahan et al. 2017; Gond et al. 2017), corporate social performance provided signals boosting organizational attractiveness for job candidates (Jones et al. 2014), and wage requirements of prospective employees were lowered by employer's social responsibility reputation (Burbano 2016). In more recent stakeholder theory literature, we find a deepening of this research by identifying higher level constructs or new scale measures (El Akremi et al. 2018). The second substream includes studies identifying stakeholder variables and their influence on corporate social performance (CSP), corporate financial performance (CFP), and the relationship between CSR and CFP. The sample included studies focused on stakeholders' reactions to the consistency of CS engagement (Oikonomou et al. 2014; Wang and Choi 2013), product social performance versus environmental social performance (Jayachandran et al. 2013), stakeholder attention (Madsen and Rodgers 2015),

and customer awareness (Servaes and Tamayo 2013). The third substream included investigations of corporate irresponsibility. The phenomenon of decoupling was studied by delineating stakeholder independent variables including corporate linguistic practices (Crilly et al. 2016) and stakeholder salience (Eun-Hee and Lyon 2015). A few papers also identified characteristics of management stakeholders and their relationship to corporate irresponsible behavior. CEO hubris is identified as negatively related to CSR (Tang et al. 2015) and prior top management CSR commitments are positively related to future corporate irresponsible behavior (Ormiston and Wong 2013).

Stakeholder Theory Threshold Concepts

We identified several threshold concepts emerging in the recent stakeholder theory literature; these can be classified across the substreams of stakeholder engagement, influence, and irresponsibility. Two different studies explore interesting aspects of the relationship between corporate social performance (CSP) and its impact on stakeholder engagement. In the first study, the authors hypothesized that not only the level but the consistency of CSP improves stakeholder relationships and subsequently firm financial performance (Wang and Choi 2013). We label this threshold concept CSP *Consistency*, and it helps managers focus not only on their level of CSP engagement, but also on how consistent they are in their commitments to CSP over time (Wang and Choi 2013). CSP Consistency is important to RML because it helps managers understand the extent of stakeholders' CS expectations and enable them to achieve their stakeholder engagement goals. A second study focuses on disaggregating the CSP construct into two distinct measures, product social performance (PSP) and environmental social performance (ESP), that differ in the information they provide stakeholders (Jayachandran et al. 2013). The study concludes that PSP had greater impacts on firm performance than ESP and identifies a PSP Negativity Bias- negative PSP has a greater negative impact on firm performance than positive PSP has a positive impact on firm performance (Jayachandran et al. 2013). This asymmetrical response to PSP is an important concept for managers to learn since it reveals a unique stakeholder response to CS activities. It can be applied when weighing the application of limited resources across varying CS initiatives.

In the substream of the literature focused on the influence of stakeholders on firms' CS outcomes, we find an emphasis on stakeholder salience (Brower and Mahajan 2013). We identify a threshold concept of *Dynamic Stakeholder Salience* that emerges from a study that attempts to explain firms' choices between greenwashing and brownwashing (undue environmental modesty) activities (Eun-Hee and Lyon 2015). Dynamic Stakeholder Salience reveals some crucial complexities that managers must understand if they are trying to engage stakeholders consistently while their environment is sending them varying information on the relevance and significance of stakeholder claims. One final threshold concept emerged in this literature. Ormiston and Wong (2013) conducted an archival study of 49 firms and found support for their hypothesis that prior CSR is positively related to subsequent corporate social irresponsibility (CSiR). We label this as *CSR Enabled CSiR*, another threshold concept for RML. Understanding this threshold concept will highlight for managers the potential traps involved with prior CSR achievements. Not only is there a risk of "resting on one's laurels," but prior CSR achievements may actively drive managers to decisions that result in irresponsible management.

Resource-Based View

The resource-based view (RBV) of the firm grows out of work on strategic factor markets, where it is argued that firms can only achieve competitive advantage if the markets for the resources and capabilities they require are imperfect (Barney 1986). Hart (1995) extended the principles of the resource-based view of the firm to include consideration for natural environment resources and developed a "natural resource-based view" (NRBV) of the firm. Over the years, the NRBV or RBV has been sporadically applied to CS research studies and has often shown up as a relevant theory in reviews of the literature (Montiel and Delgado-Ceballos 2014). Both the original theory and the NRBV extension are quite useful for managers trying to assess their ability to achieve responsible management goals. Considering natural resources that are not necessarily controlled within firm boundaries is an essential step for managers striving for environmentally responsible decision making. However, the number of RBV studies in our sample is quite small: 12 articles out of the 664. Given this infrequency, it is not prudent to summarize the state of the RBV based CS literature. However, the few papers that were identified did provide useful threshold concepts for RML.

Resource-Based View Threshold Concepts

In terms of natural resources as drivers of firm value, one paper identified the concept of *Time and Stock Dampening* (Flammer 2013). Individual CS resources within a firm vary in their value creation based both on the time when the firm acquired the resource relative to the market's initial demands for said resource and the existing stock of the resource in the industry or institutional field (Flammer 2013). In this case, stock dampening is a proxy measure for Barney's (1991) initial concept of rarity applied to resources required for CS implementation. Time dampening adds to the original VRIO framework as it relates to managers' assessment of resources. While a CS-related resource may seem rare amongst competitors, it may lose value creation potential if too much time has passed since the market initially demanded that resource. This study also introduces the threshold concept CSR as Insurance, where firms can communicate their CSR initiatives to dampen the negative impact on stock and bond prices of significant negative effects (Flammer 2013; Shiu and Yang 2017). By considering examples of historic negative events and analyzing the potential for CS initiatives to dampen their financial impact, managers can learn to integrate greater motivation for sustainability initiatives into their traditional decision making. Another threshold concept emerges in the context of sustainable development. In a study of sustainability business practices in the developing world, researchers from Boston Consulting Group and World Economic Forum found that resource depleted markets provide exceptional motivations for sustainability innovations (Haanaes et al. 2013). This threshold concept of Innovation in Resource Depleted Markets can help managers appreciate that competing in markets with high resource munificence may hinder innovation. Reflection on this concept can both inspire and motivate managers who are hesitant to explore CS in wealthier more developed contexts.

The final two threshold concepts we discovered in the RBV literature emerge from studies of dynamic capabilities. A study of mergers and acquisitions found that environmental capabilities can transfer in both directions from acquiring to acquired firm, and vice versa (Berchicci et al. 2017). This threshold concept is titled Bi-directional Environmental Capability Transfer and should provide significant insights for managers concerned with promulgating CS capabilities throughout complex corporate entities. The final threshold concept emerges from a study of the micro-foundations of sustainability capabilities. This study identified two types of industry dynamism and discovered that the individual attitudes and behaviors which underpinned the required sustainability capabilities were different across these two contexts (Strauss et al. 2017). This threshold concept helps managers appreciate the environmental, social, and cultural differences that vary across different firm domains and how these changes will demand a variety of managerial activities and motivations to accomplish CS. We refer to this final RBV-derived threshold concept as Context Specific Micro-Foundations.

New Theories and Frameworks in Corporate Sustainability

Our systematic literature review of recent work allowed us to identify a series of newer frameworks and theoretical frameworks around CS. These frameworks were not necessarily new to all disciplines but had recently penetrated the CS academic conversation. Table 2 summarizes the most relevant findings by presenting the different approaches used to conceptualize, operationalize, and implement CS strategies in the first column. We are able to group these different approaches into higher-order categories since approaches shared commonalities in their conceptualizations. These higher-order categories that we label as new frameworks and theories are presented in the second column of Table 2. The third column lists threshold concepts emerging from the list of identified CS approaches. In the next sub-section, we summarize the main research for each of the five new frameworks.

Global Systems Complexity

In the last few years, 11 articles have focused on addressing significant and complex issues related to sustainability. Terms such as "planetary boundaries" (Röckstrom et al. 2009) and "societal grand challenges" (George et al. 2016; Montiel et al. 2020) have become more prevalent in management research addressing sustainability in the framework that we call Global Systems Complexity. In fact, a recent report by the Boston Consulting Group and MIT Slow Management Review pointed out that managers recognize that their firms cannot work alone if they want to effectively address all the different societal grand challenges (MIT 2015). In 2009, Rockström and his research team published an article on "planetary boundaries" in Nature identifying and quantifying planetary boundaries as the safe operating space for humanity with respect to the Earth (Röckstrom et al. 2009). They outlined ten Earth-system processes: climate change, rate of biodiversity loss, nitrogen cycle, phosphorus cycle, stratospheric ozone depletion, ocean acidification, global freshwater use, land use change, atmospheric aerosol loading, and chemical pollution. Of these processes, three had already passed the safe operating space for human survival: climate change, rate of biodiversity loss, and nitrogen cycle. Management scholars have paid attention to these planetary boundaries as they help establish CS priorities. Management scholars point out the increasing complexity of ecological problems and call for rigorous research measuring the business impact on Rockström's boundary processes (Whiteman et al. 2013).

The US Office of Science and Technology Policy defines grand challenges as "ambitious but achievable objectives that harness science, technology, and innovation to solve important national or global problems and that have the potential to capture the public's imagination."¹ Grand challenges

¹ Retrieved from the White House archives: https://obamawhitehouse .archives.gov/administration/eop/ostp/grand-challenges (Sept. 20, 2018).

| Approaches to Corporate Sustainability | Framework | Threshold Concepts |
|---|---|--|
| Planetary boundaries (Rockstrom, 2009) Grand challenges (George et al. 2016) | Global Systems Complexity 11 articles | 14. Polycentric Governance (McGinnis, 2016) 15. Collaborative Management (Desai, 2018; Schaltegger et al., 2013; Shrivastava et al., 2013) 16. Cross-sector Partnerships (Koschmann et al., 2012) |
| Sustaincentrism (Gladwin et al., 1995) Authentic Sustainability (McShane and Cunningham, 2012) Strong vs. weak sustainability (Landrum, 2017) Sustainability 1.0, 2.0 & 3.0 (Dyllick and Muff, 2016) Anthropocene society (Hoffman and Jennings, 2015) | Worldviews for Sustainability 54 articles | 17. Sustainability Paradox (Hahn et al, 2014) 18. Sustainable Business Models (Schaltegger et al., 2016) 19. Biophilic Organization (Jones, 2016) 20. Green Chemistry (Howard-Grenville et al., 2017) 21. Circular Economy (Murray et al., 2017) 22. Feminist Intersectionality (Nath et al., 2013) |
| Scale issues (Bowen et al., 2018) Time in sustainability (Flammer and Bansal, 2017) Space in sustainability (Bansal and Knox-Hayes, 2013) | Sustainability Spatio-Temporality 16 articles | 23. Time Horizon Expansion (Ortiz-de-Mandojana and Bansal, 2016) 24. Physical Materiality (Bansal and Knox-Hayes, 2013) |
| Passion in sustainability (Shrivastava, 2010) Emotional learning (Audebrand, 2010) Physical and spiritual learning (Shrivastava, 2010) | Emotions in Sustainability 9 articles | 25. Compassion Venturing (Shepherd and Williams, 2014) 26. Emotions in Decision-Making (Montiel et al., 2018) |
| Drivers of CS Engagement (Gond et al., 2017) Processes of CS Evaluations (Gond et al., 2017) Reactions to CS Initiatives (Gond et al., 2017) | Micro-Foundations of CS 77 articles | 27. Managerial Power (Fabrizi, et al., 2014; Tost, et al., 2015) 28. Moral Outrage (Antonetti and Maklan, 2014; Hafenbrädl and Waeger, 2017) 29. Unactivated Positive Affect (Bissing-Olson et al., 2013; Carmeli et al., 2017) 30. Managerial Judgements & Attributions (Christensen et al., 2014; Vlachos et al., 2017) 31. Harmonious Environmental Passion (Robertson and Barling, 2013) 32. Enhanced Interpersonal Contacts (Delmas and Pekovic, 2013) 33. Task Significance (Ong et al., 2018) |

typically transcend geographic, economic, and societal borders (Buckley et al. 2017) and therefore require joint efforts that go beyond what a single organization can achieve. Scholars in CS have recently adopted the term "grand challenges" to refer to large global, environmental and social issues that need be tackled in order to guarantee long-term sustainability. They have also emphasized the important role of business in tackling such societal grand challenges as climate change, natural resource management, or income inequality (George et al. 2016; Howard-Grenville et al. 2017). In fact, the United Nations Sustainable Development Goals (UN SDG) can be seen as goals that aim to address these societal grand challenges.² It is important to realize that implementing solutions to grand challenges is not only a responsibility of national governments and supra-national organizations such as the United Nations, but also a responsibility shared by private organizations as well. Without the cooperation of large firms that control a significant amount of global resources, those grand challenges can only get worse. In addition, understanding the community dynamics and the role of nonprofits' in

mitigating grand challenges is an emerging research field in management (Berrone et al. 2016).

Global Systems Complexity Threshold Concepts

Our literature review revealed three distinct threshold concepts useful for managers to internalize the complexity associated with the global systems that surround CS: Polycentric Governance, Collaborative Management, and Cross-sector Partnerships. The realization of the complexity associated with sustainability-related grand challenges has generated attempts among businesses to search for collaboration with different stakeholders to address issues more effectively. First, at the top management team level, recent studies call for more open and transversal governance systems. Political scientists use the term Polycentric Governance to describe decentralized governance systems that may act independently but with a common system of norms to limit negative externalities in the long-term management of natural resources (Ostrom 2010; McGinnis 2016). Businesses can be seen as part of a polycentric governance systems since they are additional and very salient stakeholders working with other relevant stakeholders towards a common goal of reaching sustainable outcomes. The notion of Collaborative

² United Nations Sustainable Development goals (UN SDG).

Table 3 CS threshold concept themes & sustainability, responsible leadership & ethics competences (I)

| | | | Competences | | |
|---------------------------|---|---|------------------|---------------------------|--------------------|
| | CS Threshold Concepts | Threshold Concept Definition | Sustainability. | Responsible Leadership | Business Ethics |
| Emotional Agency – | 1. Moral Legitimizing | Moral legitimacy based on "civic/green" identity orientations leads higher CS practice adoption than "domestic" worlds based of traditions/family values. | to on X | | X |
| | 28. Moral Outrage | An outward-focused moral emotion precipitated by the perceive violation of moral principles. Belief in CS principles is often not enoug to move individuals towards adoption and enactment, moral outrage required. | ed gh is | | X |
| | 29. Unactivated Positive Affect | Emotional experiences of contentment, rest & relaxation, positive linked to pro-environmental behavior. | ly | X | X |
| | 31. Harmonious Environmental Passion | Positive affect that drives individuals to engage in pro-environment behaviors. CS leadership initiatives should trigger HEP, rather that focus on particular practices, to increase individual engagement in CS | al un X S. | Х | |
| | 32. Enhanced Interpersonal Contacts | The adoption of environmental standards results in greater interperson contacts between employees, these contacts result in higher labo productivity rather than distractions. | al or | Х | |
| | 33. Task Significance | Degree to which an individual's work has a positive impact on other Employees in positions with greater task significance are more attune to the social impact of work. | s. ed | X | |
| | 25. Compassion Venturing | Compassion can be transformative and trigger new business creatic with the purpose of alleviating human suffering | n | X | |
| | 26. Emotional Learning in Sustainability | The role of emotions in CS learning is underestimated but critical for success. | or | Х | |
| | 2. Disruption-linked Contagion | Adoption of CS practices is more contagious to other firms, if motivate by evidenced-based activist tactics vs. protests. | ^{ed} X | | |
| | 5. Corporate Social Performance Consistency | The consistency of corporate social performance (CSP) over time a across stakeholders improves stakeholder relationships. | & X | | |
| Stakeholder Dynamics — | 7. Dynamic Stakeholder Salience | The salient stakeholders to consider when implementing CS practice are not static, but rather the most salient stakeholders are constant changing over time. | es ly X | Х | |
| | 11. Context Specific Micro- Foundations | The individual attitudes and behaviors which underpin CS capabilities vary across different industry contexts. | es | х | |
| | 15. Collaborative Management | Organizational partnerships with dispersed stakeholder groups with differing interests (e.g., customers, communities, and advocacy group is key to accomplish shared CS goals. | s) | X | |
| | 6. Product Social Performance Negativity Bias | Negative product social performance (PSP) has a greater negative impact on financial performance than positive PSP has a positive impact. | X | | |
| | 9. Time and Stock Dampening | The value creation of individual CS resources varies based on the relative time of adoption of said resource and the existing stock of the resource. | х | | |
| | 10. Bi-directional Environmental Capability Transfer | In mergers and acquisitions, environmental capabilities can transfer in both directions; from acquirer to acquired firm and vice versa. | X | | |
| Evolving | 12. CS as Insurance | During significant negative corporate events, actively communicating CS initiatives (even those unrelated to the negative event) can dampen the negative impact on stock and bond prices. | X | | |
| Value Creation | 17. Sustainability Paradox | Accommodates interrelated yet conflicting economic, environmental, and social concerns with the goal of achieving superior contributions to sustainable development. | X | | |
| | 18. Sustainable Business Models | Understanding SBM helps companies communicate their sustainable value proposition to all its stakeholders, and better understand how it creates, and captures economic value while maintaining or regenerating natural, social, and economic capital. | X | | |
| | 21. Circular Economy | Transform the economy in order to ensure the sustainability of the life support systems of planet Earth | X | | |
| | 23. Time Horizon Expansion | Not only pursuing short-term profits but also long-term goals will help companies create sustainable value and increase the likelihood of long-term survival | X | | |
| Altruism Pitfalls | 3. Means-ends Decoupling | The case where substantive adoption of CS standards and practices don't achieve the desired sustainability outcomes. | X | | |
| | 4. Pollution Haven | Environmental performance in a given market, achieved through outsourcing high pollution activities to countries and markets with weak environmental institutions. | X | | |
| | 8. CSR Enabled CSiR | Prior CSR is positively associated with subsequent CSiR. The moral credits achieved through CSR enable leaders to engage in less ethical behavior (Ormiston & Wong, 2013) | X | | X |

Table 3 (continued)

| | CS Threshold Concepts | Threshold Concept Definition | Sustainability | Competences Responsible Leadership | Business Ethics |
|---------------------------|--|---|----------------|--|--------------------|
| Managerial Reinvention | 27. Managerial Power | The degree of power accumulated by a manager can result in complex and at times counterintuitive impacts on CS engagement. | | X | |
| | 30. Managerial Judgements & Attributions | Managers' judgements and attributions of CS have cascading trickle down effects on subordinates and help frame subordinate's assessment of CS initiatives. Internal CS initiatives will not succeed if subordinates receive conflicting attributions from their superiors. | | X | |
| | 14. Polycentric Governance | The implementation of decentralized governance systems acting independently but with a common system of norms will limit negative externalities in long-term sustainable management of natural resources. | | X | |
| | 16. Cross-sector Partnerships | Collaborations between business, government and civil society groups that engage in mutual problem solving, information sharing, and resource allocation is key to succeed on the pursuit of CS. | | X | |
| | 22. Feminist Intersectionality | Gender in combination with different prejudicial experiences yield varying types of discrimination that impact organizational justice and firm effectiveness, particularly in regard to responsible management. | | X | x |
| | 13. Innovation in Resource Depleted Markets | Highly challenged resource-depleted markets demonstrate higher levels of CS innovations than non-depleted markets. | х | | |
| Ecological Connection | 19. Biophilic Organization | Some organizations may benefit from improving their bio-cultural connection with the natural environment. | х | | |
| | 20. Green Chemistry | Efforts by chemists to reduce the health, safety, and environmental impacts of chemical products and processes can be helpful for companies aiming to reduce their impacts. | X | | |
| | 24. Physical Materiality | The notion of space matters in the pursuit of sustainable strategies. | х | | |

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Management is used to refer to organizational partnerships with stakeholder groups, such as customers, communities,³ advocacy groups or other parties who pursue or accomplish shared goals (Desai 2018). The main premise here is that since grand challenges are complex, uncertain, and evaluative (Ferraro et al. 2015), multi-actor and scholars-practitioners collaboration would facilitate addressing them more effectively (Shrivastava et al. 2013). In this line, Schaltegger et al. (2013) discuss transdisciplinarity, an approach rooted in intensive exchange between academics from different disciplines, practitioners and other societal actors, as a way to foster a coordinated collaboration in corporate sustainability practice that can help in the quest for meaningful contributions towards corporate and societal sustainability. Recent examples include the redesign of more sustainable cities (Snow et al. 2016), cooperative public-private collaborations such as the Fish Friendly Farming initiative (Gundling 2014), the Latin American Water Funds Partnership, the Sustainable Apparel Coalition, and Action for Accelerate Recycling (Nidumolu et al. 2014). Those types of collaborations are also the premise of a similar threshold concept: Cross-sector Partnerships, which also advocates for collaboration between businesses, government, and civil society groups (Koschmann et al. 2012).

Worldviews for Sustainability

Our systematic review identified 54 articles that captured the evolving worldviews on sustainability. These diverse worldviews vary in how deeply sustainability considerations are integrated into firms' mission and purpose. First introduced in 1995 by Gladwin and his colleagues, "sustaincentrism" was defined as the process of achieving human development in an inclusive, connected, equitable, prudent, and secure manner. Sustainable development components are (a) inclusiveness (environmental and human systems, near and far, present and future), (b) connectivity (world's problems interconnected and interdependent), (c) equity (fair distribution of resources and property rights), (d) prudence (duties of care and prevention), and (e) security (safety from chronic threats).

Inspired by the sustaincentrism view of the world, we identified works in our sample using similar terms such as authentic sustainability (Bradshaw and Zwick 2016; McShane and Cunningham 2012), strong sustainability (Landrum 2017), and Business Sustainability 3.0 (Dyllick and Muff 2016). All these terms advocate for a stronger commitment to the social and environmental dimensions of sustainability. Rather than only pursue sustainability activities that maximize profitability, these worldviews advocate greater weight be placed on environmental and social consequences than on economic outcomes.

In sum, effective sustainability worldviews need to reject the anthropocentric view of how humans and the planet should interact and adopt a more eco-centric

³ Montiel and Delgado-Ceballos (2014) reviewed studies until 2013. This table is an update focusing on the most recent works (2013–2018).

(sustainacentric) approach if long-term sustainability is the ultimate goal (Gladwin et al. 1995). In fact, scientists studying geology and ecosystems have proposed naming the epoch we are currently living in as the Anthropocene due to the significant human impact on Earth's geology and ecosystems including anthropogenic climate change (Crutzen and Stoermer 2000). Based on this premise, business scholars are calling for reenergized research on organizations and the natural environment to integrate the magnitude and scope of this shift to the Anthropocene (Hoffman and Jennings 2015).

Worldviews for Sustainability Threshold Concepts

We identified six interconnected threshold concepts that managers should learn in order to understand the different existing sustainability worldviews, which can also be seen as learning opportunities to operationalize CS in their operations. First, we identify Sustainability Paradox as a threshold concept connected to a particular worldview for sustainability (Hahn et al. 2014). A paradox perspective on CS "accommodates interrelated yet conflicting economic, environmental, and social concerns with the objective of achieving superior business contributions to sustainable development" (Hahn et al. 2018). The idea is that the business case for CS is not a certainty but working out the tensions of societal grand challenges is important. Managers can benefit by considering "environmental and social concerns as an end in themselves, not just as a means to the end of profit maximization" (Hahn et al. 2018: 1).

The second relevant threshold concept is Sustainable business models, which have been defined as business models that help "describing, analyzing, managing, and communicating (i) a company's sustainable value proposition to its customers, and all other stakeholders, (ii) how it creates and delivers this value, (iii) and how it captures economic value while maintaining or regenerating natural, social, and economic capital beyond its organizational boundaries" (Schaltegger et al. 2016, p. 6). Managers hoping to alter their business models for sustainability need to assess how to communicate to all the stakeholders their value creation and economic value capture without risking natural, social and economic capital. In addition, this threshold concept helps managers realize the changes needed may not be compatible with existing business models. Changing pricing, suppliers or marketing tools may not be enough and the entire business model will need to change.

Three additional interrelated threshold concepts advocate for a worldview change on how business operations are conducted: *Biophilic Organization*, *Green Chemistry*, and *Circular Economy*. All three threshold concepts can help managers learn how to re-direct their activities and operations and learn to make better decisions that are more aligned with CS goals. First, the *Biophilic Organization* metaphor has been defined as "an organization which enhances a biocultural connection with the natural environment" (Jones 2016, p. 403). The idea is that biophilic organizations can help elevate long-term, resilient, bottom-up business agendas by promoting, for example, emerging architectural fields of "biophilic design" and "generative design." Such fields, which work on integrating natural systems and processes into the design of the built environment, could in turn reduce tensions between resilience and efficiency demands. Secondly, the threshold concept of Green Chemistry is defined as an effort by chemists to encourage other chemists to reduce the health, safety and environmental impacts of chemical products and processes (Howard-Grenville et al. 2017), which will contribute to reducing organizations' environmental footprints and direct them into being more environmentally sustainable. Another area that has recently received extensive coverage among business scholars is the Circular Economy (Murray et al. 2017). We define it as an additional threshold concept that aims at integrating economic activities and environmental wellbeing in a sustainable way exploring closed loop production process and cradle-to-cradle approaches to production with the ultimate goal of minimizing or even achieving "zero waste".

Finally, recent works have also pointed out the role of gender in CS. Nath et al. (2013) describe *Feminist Intersectionality* (borrowed as a relevant threshold concept in this study) to suggest that that "gender intersects with other identities to yield different values, experiences, and opportunities that can lead to gender-based preferences for CSR information" (p. 85). The role of gender goes beyond women in management positions to include how, for example, CEOs with daughters are more likely to run more socially responsible firms (Beard 2015). Therefore, managers that understand the Feminist Intersectionality threshold concept can more effectively understand the role that gender plays in the social and environmental challenges faced by their firms.

Sustainability Spatio-Temporality

Our review identified 16 articles that have paid special attention to scale issues with regards to the distinctive temporal and spatial dimensions of sustainability (Bansal et al. 2018). This is nothing new, since the notion of time is central to the 1987 Brundtland report on sustainable development—developing in a way that ensures the survival of future generations. However, managers still have to learn strategies that can help balance short-term financial needs with long-term sustainability as well as better integrate spatial considerations into their actions. Still today, businesses are accused of short-termism, which is seen to be at the heart of many of today's problems (Flammer and Bansal 2017), such as organizational inaction on climate change (Slawisnki et al. 2017). Due to these spatio-temporal tensions, a recent stream of CS research pushes for understanding the effects of time and space in business settings. Regarding time, studies have looked at the tensions between short-term and long-term strategies concerning sustainability-related grand challenges like climate change (e.g., Slawinski and Bansal 2015) and how addressing both time frames can help mitigate businesssociety tensions. Regarding space, we also see recent studies in the management literature that, borrowing from economic geography, try to better understand the role that location and other spatial variables have in the diffusion of CS (e.g., Husted et al. 2016a, b).

Sustainability Spatio-Temporality Threshold Concepts

Two interconnected CS threshold concepts emerge from the spatio-temporal stream of research. First, Ortiz-de-Mandojana and Bansal (2016) proposed the use of longterm performance outcomes to measure organizational resilience, including financial volatility, sales growth, and survival rates. Using this construct of organizational resilience, they demonstrated empirically that business have good reasons to go beyond pursuing short-term profits and pursue long-term sustainable goals. We labeled this threshold concept as Time Horizon Expansion. Managers should re-evaluate their performance metrics, not only financial, but also those concerning governance, the environment and society to integrate measures that also account for longterm expected performance. Regarding space, Bansal and Knox-Hayes (2013) used the example of carbon markets to illustrate how Physical Materiality (our second threshold concept) is as important as socio-materiality. The disembodiment of financial instruments for carbon led to the distortion of its "real value," which prevented carbon reductions.

Overall, this body of literature advocates for an expansion of the time–space dimensions to tackle sustainabilityrelated grand challenges. Managers need to understand the complexity of a multifaceted reality where the time and space boundaries are expanded and even blurred. To pursue CS, business leaders must go beyond their traditional short-term and locally geographic considerations and find new ways of integrating these crucial spatio-temporal dimensions.

Emotions in Sustainability

Scholars in the field of organizational behavior have devoted part of their research to better understanding the role of emotions in the workplace (e.g., Bono and Vey 2005) by studying their effect on different situations such as leadership (George 2000), business ethics (Lurie 2004), and business failure (Shepherd 2003). Emotions interfere with business decisions, and understanding how emotions affect managers' behavior is relevant to all business areas including CS.

Recently, the role that emotions play in companies' decisions to pursue CS has started to call the attention of management researchers as seen in 9 articles in our sample. Understanding the interplay between emotions and the micro-foundations of CS is a growing area of interest in the field. For instance, Hafelbrädl and Waeger (2017) studied how moral emotions moderate the likelihood of managers to engage in CSR even when they believed in the business case for CSR. Voronov and Weber (2016) recently developed a concept of emotional competence that expands the view of emotions in institutions, tying personal experience and social performance to institutional ideals. Emotions are a crucial component of CS that needs to be understood by managers.

Emotions in Sustainability Threshold Concepts

We identify two threshold concepts in the recent literature on emotions and CS. First, Compassion Venturing emerges as a relevant threshold concept connected to the recent line of research on the creation of new organizations with the purpose of alleviating human suffering (Shepherd and Williams 2014). This integration of compassion in organizations was previously coined by Dutton et al. (2006) as "compassion organizing", which describes how established companies adapt their organizational structure and practices with the aim of helping to alleviate its members' suffering. In the context of compassion venturing, Miller et al. (2012) built a model identifying three different mechanisms as key to transforming compassion into social entrepreneurship: integrative thinking, prosocial cost-benefit analysis and commitment to alleviating others' suffering. A clear connection can also be made between compassion and the likelihood of companies or entrepreneurs to engage in CS.

Finally, studies in sustainable management education highlight the importance of motivating change towards sustainability through emotions. A few years back, Shrivastava (2010) offered a holistic view for environmental management education that combines cognitive learning with emotional/spiritual and physical engagement to develop a passion for sustainability. While cognitive learning deals with theoretical concepts, analysis and investigation, emotional/ spiritual engagement refers to values and attitudes that effectively motivate the learner, such as sensitiveness, empathy and environmental values, and physical learning relates to exploring locations, site visits and physical exertion. Montiel et al. (2018) expand on the need for emotional learning by mapping how case studies can trigger emotions that will drive managers to pursue sustainable behaviors. From these studies emerges our last threshold concept: Emotional learning in Sustainability.

Micro-foundations of Corporate Sustainability

A research movement in micro-foundations (Barney and Felin 2013) has recently been taken up by organizational behavior (OB) scholars and proposed as a theoretical lens that can help to bridge the divide between macro and micro levels of analysis. This theoretical lens of micro-foundations can be used to achieve a more complete understanding of CS by studying multiple units of analysis and applying OB theories and empirical methods (Morgeson et al. 2013). In particular, the literature calls for scholars to use a microfoundational perspective in research on sustainability to study the social action and aggregation mechanisms by which individual activities become organizational sustainability processes (Cooper et al. 2017). With several special issues on the topic during the time period of our literature review, micro-foundations emerged as a significant percentage of our final sample (77 articles). A recent systematic review article provides an excellent analysis of what the authors call a "surge of person focused CSR research" (Gond et al. 2017), and their proposed framework of the microfoundations literature provides a useful tool for organizing the articles in our sample.

Because the micro-foundations movement focuses on the application of OB theories, we find overlap with stakeholder and institutional theory in our sample of the recent literature. We used the authors' own language to determine classification. All papers that explicitly stated a micro-foundations approach were classified into the micro-foundations category, even if a study contained theoretical elements from other established management theories. While this may have skewed some of the counts for each theoretical approach, our goal is to reveal unique RML threshold concepts. Thus, our micro-foundations category highlights threshold concepts distinct from those in other established theories.

Gond et al. (2017) identify three distinct domains of micro-foundations research: drivers of CS engagement, processes of CS evaluations, and reactions to CS initiatives. We identified several threshold concepts in each stream of the micro-foundations of CS literature.

Micro-foundations of CS Threshold Concepts

In the domain of the drivers of CS engagement, Gond et al. (2017) identified four categories of drivers: instrumental, relational, moral, and other individual. We identified three threshold concepts in this stream of the literature emerging from instrumental and moral drivers. *Managerial Power* is an example of an instrumental driver of CS (Gond et al. 2017), and studies have identified a wide array of outcomes. One study identifies CEOs with less power as more supportive of CSR, though they may lessen that support as they gain power (Fabrizi et al. 2014). A different study finds that

as managers build power through experience, they are more inclined towards intergenerational beneficence as mediated by a sense of responsibility for others' long-term interests (Tost et al. 2015). The emergence of this intergenerational beneficence has significant potential impacts on the quantity and effectiveness of sustainability decision making. Therefore, *Managerial Power* has complex and at times counterintuitive impacts on CS engagement and emerges as a vital threshold concept for managers to further examine the role that their individual power plays in CS decision making and commitment.

Another category of drivers of CS engagement is moral drivers, and there is continued work in this area of study in our sample. The study of personal values and their role in driving CS enactment identifies a unique threshold concept. In a study of fair market ideology, researchers found that managers who espoused such an ideology were more likely to subscribe to the idea of a business case for CSR (Hafelbrädl and Waeger 2017). However, the study also finds that despite their espoused beliefs, these mangers are not more likely to engage in CSR activities because their fair market ideology limits their moral outrage (Antonetti and Maklan 2014; Hafelbrädl and Waeger 2017). Therefore, Moral Outrage plays a significant link between belief/knowledge of CS and enactment of actual CS initiatives. The literature also demonstrates that not just long-standing values, but even daily swings in emotion, can have significant impacts for CS enactment. A study of employee emotional experiences of contentment, rest and relaxation (unactivated affect) found that these positive emotions had a significant impact on pro-environmental behavior (Bissing-Olson et al. 2013). Unactivated Positive Affect signifies a unique threshold concept for managers to consider, leading to greater attention to the emotional state in which organizational decisions are usually made.

The second domain of micro-foundations research is individual evaluations of CSR, where evaluations refer to the "cognitive and affective processes by which people gather and organize information related to organizations' CSR initiatives" (Gond et al. 2017). In the responsible management context, we are interested in how managers frame their understandings of CS initiatives and inform future decision making and behavior. Gond et al. (2017) divide this domain into two types, cognitive processes and affective processes. In the cognitive processes type we identified a threshold concept concerning the cascading effects of Managerial Judgements and Attributions of CSR (Vlachos et al. 2017). Three studies explored the cognitive processes by which managerial attributions trickle down to middle managers and subordinates and influence their framing and assessment of CS initiatives and sustainability principles (Christensen et al. 2014; Jones et al. 2014; Vlachos et al. 2014, 2017). This presents a powerful concept for middle managers as they can apply it to themselves to understand how their superiors may

be influencing their CS-related decision making as well as apply it to subordinates to appreciate how their own judgements and attributions may promote or hinder CS behaviors. In another study of leadership traits and behaviors influencing employee CS evaluations, an affective construct is defined to mediate the relationship between transformational leadership and individual behaviors. Robertson and Barling (2013) define *Harmonious Environmental Passion* as a positive affect that drives individuals to engage in proenvironmental behaviors. This threshold concept challenges managers to address the role that environmental specific emotions play in shaping their ultimate decision making on CS-related initiatives.

In the third and final domain of the micro-foundations research stream, Gond et al. (2017) identify a number of studies that focus on understanding individual reactions to CSR and their underlying mechanisms. A number of the studies in this domain overlap with some of the studies identified in the stakeholder theory papers. Studies of whether CSR initiatives lead to certain OB/HR outcomes such as employee retention, commitment, and satisfaction are examples of reactions to CSR. Despite this overlap, our sample did identify two additional threshold concepts, both emerging from a further exploration of outcome mechanisms. A study of the positive relationship between the adoption of environmental standards and labor productivity identified Enhanced Interpersonal Contacts as an important mediator (Delmas and Pekovic 2013). Managers might traditionally identify personal contacts as detrimental to labor productivity, but contacts actually produced greater productivity in a context of environmental standards adoption. The insights from this threshold concept will allow managers to examine the level and types of personal contacts inherent in their organization and how they may contribute to both greater productivity and sustainability.

Another threshold concept, *Task Significance*, emerged as a moderating construct in a study of how CSR can drive organizational citizenship behavior (Ong et al. 2018). Task significance is a job-level construct that refers to the degree to which an employee's work has a positive impact on other individuals, and employees in positions with high task significance are more attuned to the social impacts of their work product (Ong et al. 2018). Task significance can challenge managers to explore how significance is distributed amongst the various positions of an organization and whether different distributions might lead to greater prosocial behaviors at work.

Discussion

In this study we first utilized a review of the most recent CS literature to help identify threshold concepts for the promotion of RML. Both traditional and newer theoretical frameworks in CS were studied to identify 33 threshold concepts that challenge managers' traditional logics and provide an excellent focal point for reflexive exercises that constitute an RML opportunity (Hibbert and Cunliffe 2015). Our list of threshold concepts emerges from the academic literature and provides insight on the latest thinking in the field of CS. The full list is summarized in Table 3, where we also provide a brief definition of each threshold concept to illustrate the "a-ha" moment that each of the threshold concepts should generate in managers. We also mapped the learning potential of each concept to the appropriate RML competence: sustainability, responsible leadership, and business ethics (Laasch and Moosmayer 2015b). This mapping is a first approximation of the relevant competences strengthened by each threshold concept. However, we feel that there is greater learning potential if, after their moral reflexive practice, managers are challenged to report which competences they feel were most impacted by their engagement with these new concepts.

Once the list of 33 CS threshold concepts was identified we took a step further and grouped them in what we labeled as CS threshold concept themes. In particular, we map six different themes that represent the major areas of RML threshold concepts and help organize managers' learning (see Table 3). We found that no single theory or framework dominated any of the identified RML threshold concept themes. This result supports the continued use of varying organizational theories and frameworks in the exploration of CS phenomenon. Therefore, one theoretical contribution that emerges from our exploration is support for the continued use of different theories to better understand CS and derive meaningful themes for practitioners. The next section provides an overview of the potential that each of the CS threshold concept themes has in promoting action towards responsible management.

Corporate Sustainability Threshold Concept Themes

Emotional Agency

A set of relevant CS threshold concepts seem to coalesce around the often-underrated role of emotions in business life. A number of the concepts clearly identify a key role for emotions in managers' decision making as well as the responses of key stakeholders. Taking these threshold concepts as a group, we conclude that managers should be aware of the role that emotions play in business, especially in critical issues such as the ones concerning sustainabilityrelated grand challenges. There is an opportunity to improve sustainable outcomes if managers are able to channel these different emotions, experienced not only by employees but other relevant stakeholders such as customers and communities, towards identifying points of intervention and finding solutions to grand challenges. Feelings and emotions such as compassion have been found to be important drivers in the creation of new business opportunities that challenge the status quo and reinvent business models. It is then critical for managers to be alert about the potential that emotions present as a learning opportunity in the advancement towards CS.

Stakeholder Dynamics

Another set of CS threshold concepts converge towards a similar conclusion: no company or manager on its own will be able to effectively pursue CS. Sustainability-issues are complex and touch different actors in society, and those actors and their interests are in constant dynamic flux. Thus, facing the challenge requires innovative ways of understanding and collaborating with all stakeholders, sometimes even in the most unpredictable ways. Managers pursuing CS need to grasp the complexity of this new reality and keep an open mind in their stakeholder relationships. Taking an interactive approach to stakeholder relationships by forming partnerships with disparate stakeholders such as NGOs, communities, the government and even competitors will likely facilitate not only the sustainability learning experience but also the potential to find more cost-effective solutions to CS challenges. It is important for managers to embrace this more complex boundary spanning role that goes beyond their companies' operations by taking a more holistic and dynamic approach to stakeholder relationships.

Evolving Value Creation

Nine of the threshold concepts identified in our survey related directly to an expanding definition of value creation. Some of these concepts focused on new ideas of what is measured as value, including social goals, waste elimination, and improved organizational capabilities. Additionally, some concepts focused on traditional measures of value and how that value creation may be impacted by time horizons, industry contexts, and positive versus negative social performance. The CS field has long challenged traditional measures of firm performance with concepts such as the triple bottom line (Elkington 1997), but these threshold concepts identify very specific and complex value concepts that are very useful for managers looking to further build their responsible management competences. Helping managers to evolve their traditional assumptions about value creation is a crucial step in RML, and the threshold concepts identified in this theme are an excellent starting point for learning how to redefine value in their own firm and career contexts.

Altruism Pitfalls

The CS literature has a long history of exploring unintended consequences and the coopting of sustainability rhetoric by firms that fail to meaningfully act sustainably, and three of our threshold concepts can be grouped in a theme that captures these phenomena. All three of our altruism pitfalls threshold concepts focus on either underachievement of CS goals or actual social and environmental harm emerging from CS initiatives. This theme highlights the importance for managers to develop skills in self-critique and constant assessment as part of any CS initiative, to help measure and assure that the intended results are achieved. These threshold concepts provide a great springboard for managers to apply to their own experience and engage in self-assessment of their own past actions.

Management Reinvention

In our set of threshold concepts, we identify five that relate to a reimagining of managerial roles and behaviors. A portion of these were focused on managerial qualities, such as power and judgments that impact the implementation and effectiveness of CS activities. These concepts reinforce the fact that managers' actions alone don't determine CS outcomes, their beliefs, power relationships, and a number of other factors either coordinate or conflict with the CS actions they undertake. Another set of these concepts focused on the manner by which managers try to implement their CS initiatives. They identify the use of decentralization and cross-sector partnerships as effective means to achieve CS goals. The concepts in this theme may relate to broader ideals of servant leadership (Liden et al. 2013); however, these concepts emerged specifically from studies of CS enactment. Therefore, these concepts provide highly specific insight about the role of specific leadership traits or behaviors and how they relate to the successful implementation of responsible management practice. They provide an important dimension to any program looking to promote RML.

Ecological Connection

Finally, a set of CS threshold concepts converged towards the claim that businesses had to reconnect with the natural environment. Rather than considering their operations in isolation (Harris and Freeman 2008) and looking at the natural environmental as a mere source of resources, managers need to embrace the fact that their operations are within an existing ecosystem that they might have disrupted with some of their practices. Thus, re-assessing the companies' role within the natural environment, being aware of the impacts caused in their surroundings and finding alternatives to be more connected with the natural environment are all important. This task will not always be easy and requires changes and collaboration with other businesses and relevant stakeholders.

Limitations and Future Research

Our study is not without limitations. A primary limitation stems from our sole focus on top management and specialized management journals for our literature sample, we have not reviewed the latest years of research in public policy, economics, political science, or any number of disciplines that might provide additional CS threshold concepts. Another challenge to our methodology is the particular list of keywords used to search the last 5 years of journals. While the list generated a sizeable data sample it is likely that some important studies in the CS literature may not have been captured by our search method because they did not address CSR or CS in their title or abstract. While there are undoubtedly more threshold concepts that could be identified, our list of threshold concepts was never meant to be exhaustive. We strived to identify threshold concepts that emerged from established management theories as well as the latest emerging ideas in the management literature. Despite the limitations of our sampling, we did generate a comprehensive list of threshold concepts derived from both established and new management theories.

Future research should study how these evolving CS threshold concept themes will change over time and empirically test if emphasizing the learning of these different themes enhances responsibility in managers and in turn helps companies achieve their CS goals. In addition, future studies can look at related CS disciplines such as public policy, economics, marketing or ecology to validate our current CS threshold concept themes and potentially identify additional relevant CS threshold concepts that could accelerate the entire RML experience.

Conclusion

In this paper we have attempted to span the research-practice gap by exploring the latest CS studies and identifying threshold concepts that can be used through moral reflexive practice to achieve RML (Hibbert and Cunliffe 2015). We offer a threshold concept framework to help managers learn about complexity associated with pursuing CS. By reviewing the recent management literature that analyzes CS and borrowing from both, established organizational theories and emerging CS frameworks, we are able to identify 33 distinct threshold concepts and six threshold concept themes. Both the concepts and themes provide a useful translation of theory into digestible terms for a more effective implementation of CS. In addition, based on the urgent need to bridge the research-practice gap that usually emerges from academic literature, we designed a toolkit for managers that provides management friendly descriptions of the threshold concepts identified and provides guidance for reflexive practice to enhance individual RML. This toolkit can be utilized by an individual manager for self-study or introduced to workplace training sessions by skilled corporate trainers. The toolkit can be accessed electronically at the journal's website.

The CS threshold concepts and threshold concept themes we identify should be seen as a first step in devising exercises and workplace interventions to motivate managers' learning required for responsible management. The CS threshold concept themes must be engaged through a process of critical reflexivity, and this requires identifying the proper exercise. Both threshold concepts and themes can be introduced through guest lectures, team building retreats, web-based learning modules, or onsite classes with corporate trainers. The proper choice of exercise will depend on a firm's business context as well as exactly which theme they wish to be engaged. Getting managers to be critically reflexive on concepts of responsible leadership might work better in a group setting such as a team building retreat; while some of the threshold concepts around sustainability would work just fine in the online learning environment. Regardless of the choice of exercise, the threshold concept themes developed in our study utilize the existing developments in CS and management theory to provide a roadmap for practitioners seeking RML.

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Compliance with Ethical Standards

Conflict of interest All authors declare they have no conflict of interest.

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