Seeing versus Doing: How Businesses Manage Tensions in Pursuit of Sustainability

ABSTRACT

Management of organizational tensions can facilitate the simultaneous advancement of economic, social, and environmental priorities. The approach is based on managers identifying and managing tensions between the three priorities, by employing one of three strategic responses. Although recent work has provided a theoretical basis for such tension acknowledgment and management, there is a dearth of empirical studies. We interviewed 32 corporate sustainability managers across 25 forestry and wood-products organizations in Australia. Study participants were divided into two groups: (1) those considered effective at corporate sustainability and (2) a status-quo group. Contrary to current theory, our findings showed that acknowledgment of organizational tensions was widespread in the Australian forestry and wood-products industry and not limited to those managers who are effective at managing corporate sustainability. What differed was the degree to which managers did something about the perceived tensions—with the effective group more consistently acting to manage and resolve paradoxical scenarios. Our findings suggest that existing theoretical constructs of tension management may not adequately capture the individual-level complexity involved with managing tensions in practice.

KEYWORDS: corporate sustainability; integrative view; paradox; resolution; separation strategy; synthesis strategy; tension management.

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Researchers of corporate sustainability investigate strategies and tactics that business can deploy to achieve more equitable social and environmental outcomes. Since the late 1980s, ethical rethinking occurred, with emphasis shifting to concerns about global and intergenerational fairness, widely touted as sustainable development by the United Nations' World Commission on the Environment and Development (Daly and Cobb 1990; DesJardins 2007). The United Nations' agenda for sustainable development gained new traction when, in September 2015, the governments of all UN member countries adopted a set of sustainable development goals to end poverty, protect the planet, and ensure prosperity for all as part of Agenda 2030. Yet, how business can contribute proactively to this sustainability agenda has not yet been studied sufficiently (Markman, Russo, Lumpkin, Jennings, and Mair 2016).

Recent theoretical developments on sustainable business practice have introduced the management of priority tensions as a means for achieving such sustainability outcomes (Gao and Bansal 2013; Hahn, Pinkse, Preuss, and Figge 2015; Van der Byl and Slawinski 2015). Tension management suggests that managers identify tensions between economic, social, and environmental priorities in their organizations. Once tensions are understood, distinct strategies can be applied to manage the tensions with the overarching goal of achieving the equitable distribution of financial and nonfinancial value among the economic, social, and environmental priorities (Hahn, Preuss, Pinkse, and Figge 2014). Although this integrative view has great potential for informing theory development, the view currently lacks empirical support.

Our study seeks to address this lack of empirical support on individual-level tension acknowledgment and tension management to bring about greater corporate sustainability. More specifically, we examine how tension management could result in improved outcomes in corporate sustainability and how tension management strategies might contribute to the

organizational pursuit of sustainability. By drawing on a sample of 32 senior managers across 25 organizations in the Australian forestry and wood-products industry, we show that the major difference between more and less sustainable organizations was not so much the acknowledgment, or recognition, of tensions, but rather the action taken in response to these tensions. Furthermore, our findings indicate that synthesis was the most common tension management strategy in this industry. We relied on objective indicators such as (independent) third-party certifications and organizational documents to assign the study participants to either the more sustainable (i.e., effective) group or the less sustainable (i.e., status-quo) group. Participants were interviewed regarding their views of corporate sustainability, tension acknowledgment, and the processes they employed to manage these tensions.

The findings of this study have a wide range of implications for the theory and practice of corporate sustainability. Our interview data clearly support the conceptual difference between tension acknowledgment and tension management. Empirically, we show acknowledgment to be a necessary first cognitive step for managing tensions between economic, social, and environmental priorities. At the same time, not all business executives who acknowledge a tension proceed to manage it, especially if the executives lead an economics-oriented status-quo organization. Among the managers who did proceed, the overwhelming majority chose a synthesis strategy. These important nuances, which extend current theory, could in turn inform future theory development regarding strategic choices in corporate sustainability. In addition, the findings suggest that sustainability managers should reinforce the simultaneous achievement of the different sustainability priorities because the synthesis strategy seems to resonate most with practitioners.

The article proceeds as follows. First, we provide an overview of the tension management literature within the corporate sustainability literature and, from this understanding, derive research questions investigated in our study. After introducing the

methods employed, we summarize the results, organized as answers to the research questions. Finally, we discuss the most important theoretical and practical implications of our findings.

LITERATURE REVIEW

Tension Management

Corporate sustainability is widely seen as the business application of broader societal-level sustainable development goals, which recognizes the importance of profit generation, but also requires businesses to pursue the wider social and environmental priorities of society, set by political and corporate elites (Hahn et al. 2015). Corporate sustainability fosters the idea of tension because the concept is internally contradictory (Borland 2009; Gladwin, Krause, and Kennelly 1995; Hahn et al. 2014; Shrivastava 1995): the three corporate sustainability priorities of economic, social, and environmental outcomes may be in paradoxical tension (Berger, Cunningham, and Drumwright 2007; Mason and Doherty 2016; Smith and Tushman 2005). A paradox consists of "contradictory yet interrelated elements that exist simultaneously and persist over time" (Smith and Lewis 2011, p. 382). This contradiction, or tension, between the three different corporate sustainability priorities (also known as sustainability pillars) has been viewed broadly on the level of economic development and the ethical alternative (Gray 2010), or social responsibility *versus* economic rationality (Bento, Mertins, and Lourdes 2016; Orlitzky, Schmidt, and Rynes 2003). However, more common is the view of an inter-conceptual tension between the economic, social, and environmental priorities (Borland and Lindgreen 2013; Carroll 1991; Garriga and Melé 2004; Haffar and Searcy 2015; Orlitzky 2011).

This tension between the three corporate sustainability priorities also has been discussed in a number of fields, including sustainable supply-chain management (Karjalainen and Moxham 2013; Matos and Hall 2007; Seuring 2011; Wu and Pagell 2011), stakeholder theory (Dobele, Westberg, Steel, and Flowers 2014; Hall and Vredenburg 2003; Longo,

Shankar, and Nuttall 2017), triple bottom line (TBL) reporting (Gray and Milne 2004; Milne 2006), sustainable design (Ravasi and Stigliani 2012; Pohekar and Ramachandran 2004), corporate social responsibility (Fremeaux and Michelson 2017; Lindgreen and Swaen 2010), and now in corporate sustainability (Borland, Ambrosini, Lindgreen, and Vanhamme 2016; Gao and Bansal 2013; Haffar and Searcy 2015: Hahn et al. 201b; Neugebauer, Figge, and Hahn 2016; Van der Byl and Slawinski 2015).

Drawing on research from strategic paradox (Beech, Burns, Caestecker, MacIntosh, and MacLean 2004; Clegg, Cunha, and Cunha 2002; Mason and Doherty 2016; Poole and Van de Ven 1989; Smith and Lewis 2011), Hahn et al. (2015) propose that the acknowledgment and management of organizational tensions fosters integrative sustainability, which advocates that organizations embrace the tensions that emerge between TBL factors to simultaneously pursue all three. The authors state that this leads to superior social and environmental outcomes that go beyond the TBL because tension management "explicitly addresses the oftentimes conflicting relationships between these different factors" (p. 299). This view is supported by a growing body of literature that advocates the paradoxical view of corporate sustainability for improved social and environmental outcomes in business (Ivory and Brooks 2018; Sharma and Jaiswal 2018). This view acknowledges that concurrent advancement can occur in certain situations. However, these authors also believe that the corporate sustainability priorities inherently are opposing, creating varying degrees of tensions in the short, medium, and long term (Crane and Matten 2010; Gao and Bansal 2013; Hahn, et. al. 2015). Hahn et al. (2015) theorize that these tensions exist on multiple levels in the organization and need to be managed in order to achieve integrative outcomes. The authors state that tension management involves two steps—(a) the acknowledgment of tensions followed by (b) strategies to manage economic, social, and environmental priorities, as shown in Figure 1. The process of tension

acknowledgment and subsequent deployment of tension management strategies is described next.

(Insert Figure 1 about here.)

Cognitive Frames and the Acknowledgment of Tensions

In the emerging paradox view of corporate sustainability, the acknowledgment of tension is seen as the preliminary and most critical step in the tension management process (Hahn, Figge, Pinkse, and Preuss 2018). Tension acknowledgment is the recognition of a paradox between the corporate sustainability priorities, whereby organization members value each outcome equally and thereby identify inherent contradictions when two or more priorities are in conflict.

The importance of the tension acknowledgment step was described by Smith and Lewis (2011), who provided foundational thinking for the work by Hahn et al. (2015). Smith and Lewis (2011) illustrate that organizational tensions can be either latent or salient. A latent tension is one that exists within the organization but remains unseen by organizational actors, when the perspective of actors has not yet brought the tension to light. A latent tension becomes salient when it is experienced by organizational actors. Factors rendering tensions salient include environmental and ethical issues such as change and scarcity. In addition, individual actors are expected to perceive tensions based on the priorities and values they hold. Once a tension is salient, the individual chooses to manage it or dismiss it. Dismissing the tension results in a vicious cycle with one end of the paradox gaining dominance, which in business typically is seen when the economic dimension takes priority. Embracing the tension results in a virtuous cycle of improvement where actors manage and distribute equally among varying priorities, which in corporate sustainability means distribution among economic, social, and environmental value. Smith and Lewis (2011) argue that individuals with the suitable cognitive abilities to perceive tensions and the behavioral and emotional wherewithal to manage complex

situations enact tension management. The ability to cognitively perceive and subsequently act upon tensions therefore encapsulates the tension management process.

Smith and Lewis' (2011) work began the formation of two distinct cognitive frames that define the approach of organizational leaders to corporate sustainability (Hahn et al. 2014; Hahn et al. 2018). The first frame is the paradoxical frame, which states that managers acknowledge the paradoxical scenario presented by economic, social, and environmental outcomes in business. The second frame is the business frame, which adopts a profit-priority view in the pursuit of business activities. A paradoxical frame describes actors who possess the necessary cognitive and behavioral traits espoused by Smith and Lewis (2011) to manage such tensions, which Hahn et al. (2014) expanded to include characteristics such as the adoption of multiple rationalities in business, a high number of cognitive frame elements, plurality, multiple goal alignment, and paradoxical thinking. Theory states that actors, who adopt these frames, are able to both perceive and manage sustainability paradoxes, termed "tension acknowledgement" by Hahn et al. (2015). The claimed seamless link between cognitive frames and tension management behaviors is an assumption that is yet to be demonstrated empirically and may not suffice in describing a valid antecedent of what is a widely behavioral and strategic field of study.

To date, there is one empirical article that has been developed to explore the above claims (Sharma and Jaiswal 2018). Based on tracking the cognitive frames of a single project manager operating under a wider executive management team, Sharma and Jaiswal's study showed that a project manager started a health-based implementation with a paradoxical frame, which informed the project manager's views about the actions that should be implemented within the overall project. Over time, however, the project manager's paradoxical frame did not sustain, and the project manager increasingly adopted a business case frame based on profit

pressures from senior management. Eventually, the project failed and was terminated by executives.

To date, Sharma and Jaiswal's (2018) case study is the sole empirical study suggesting the relevance of the paradoxical frame in its connection with corporate sustainability and tension management behaviors. Arguably, the identification of paradoxical framing among middle managers (e.g., Sharma and Jaiswal's project manager) does not shed light on this issue. This is because the project manager was not responsible for funding decisions or the overall profitability of the organization and thus did not engage with the economic priority of the wider sustainability tensions, which CEOs and organizational leaders face. As demonstrated by Sharma and Jaiswal (2018), cognitive frames are fluid and changing, and their use has been criticized, as theorists claim them to be concrete conceptions which, in fact, are dynamic and continually evolving constructs (Cornelissen and Werner 2014). In line with such critiques, our study adopts the view that tension acknowledgement, as well as cognitive frames, play an important role in the wider strategic and behavioral processes of tension management; nonetheless, tension acknowledgement and cognitive frames are insufficient to explain the enduring motivations and behaviors required for organizational leaders to consistently effect tension management.

The acknowledgment of tensions and paradoxical framing of corporate sustainability issues are claimed to precede the deployment of three possible tension management strategies: acceptance, separation, and synthesis strategies (Hahn et al. 2015). We discuss these three strategies next.

Tension Management Strategy 1: Acceptance Strategy

The first strategic response to organizational tension is termed an acceptance strategy. This strategy, which is commonly referenced in the strategic paradox literature (Beech et al. 2004; Clegg et al. 2002; Hahn et al. 2015; Smith and Lewis 2011), occurs when decision

makers distinguish the two sides of a paradox, but do not attempt to resolve it. The strategy actively keeps the paradox open, maintaining both ends of the paradox in contradiction with one another (Hahn et al. 2015). The purpose of keeping both ends of the paradox open is so that managers can address thoroughly each end of the paradox through alternative means rather than seeking a single strategic response, which may not adequately address each priority.

Hahn et al. (2015) proposed a variety of acceptance strategies viable for managing organizational tensions. The authors cite the tension between long-term and short-term interests that organizations often face in their corporate sustainability journeys. The former interests are concerned with long-term financial viability, social and environmental interests, whereas the latter interests are concerned primarily with financial return. To manage these tensions, a dual bonus system for organizational actors could be put in place: one system rewards short-term goals, the other system rewards the achievement of long-term objectives (Kolk and Perego 2014). Another example is managing the tension between personal and organizational sustainability agendas. Such a response can be enacted by organizations creating green teams whereby staff voluntarily engage in the planning and development of green initiatives outside of the normal organizational structure (Fleischer 2009; Glen, Hilson, and Lowitt 2009). In these and other ways, the acceptance approach to sustainability could manifest. However, little is currently known about the performance of such approaches in practice relative to each other.

Although empirical research in all tension management strategies is limited, Beech et al. (2004) previously conducted case study research, which provides exploratory support for the acceptance strategy. These authors examined a reform initiative within a medical clinic, which included mapping the various organizational tensions and designing and implementing various strategic responses to improve the organization's performance. The focus of the study was on acceptance strategies and how keeping the paradox open results in new organizational practices. Beech et al.'s (2004) case study conclusions suggest that positive outcomes can be

found using such strategies. However, the authors also recognized that acceptance strategies are not always the easiest or most preferred management tool, due to managers' implicit desire to seek resolution to tensions rather than maintain the paradox.

Tension Management Strategy 2: Separation Strategy

In the separation strategy, the paradox is separated either spatially or temporally (Hahn et al. 2015; Sharma and Jaiswal 2018), meaning that different priorities are addressed at varying geographic locations or at different times. Spatial separation can involve addressing one priority at the organizational level and another priority at the individual level, or addressing each end of the paradox at different locations, plants, or offices spanning various countries or regions. Temporal separation involves addressing one end of the paradox at a certain time and the other end at another point in time.

Similar to the acceptance strategy, little is known about the viability of the separation strategy in practice. Clearly, several different manifestations of separation approaches are possible. For example, to address the tension between personal and organizational sustainability agendas, organizations can create temporal pockets within or outside organizations so individual members can pursue personal corporate sustainability agendas (e.g., volunteering programs) (see, for example, Peloza and Hassay 2006; Rodell, Breitsohl, Schröder, and Keating 2016). Another example of a separation strategy that addresses the tension between short-term and long-term goals is the implementation of corporate sustainability reforms taking a top-down approach (Mirvis and Googins 2006): while higher-level organizational actors consider long-term objectives, lower-level organizational actors focus on short-term needs.

Tension Management Strategy 3: Synthesis Strategy

Synthesis strategies are concerned with meeting multiple demands simultaneously by finding ways to link or accommodate both ends of the paradox (Hahn et al. 2015). The authors

describe several strategies that include implementing alternative executive governance systems to relax short-term profit orientations in favor of long-term value, or enacting process and cultural reforms that are inclined to integrative corporate sustainability outcomes over profit generation. Synthesis strategies concurrently meet both ends of the tension by transforming the sustainability paradox into more manageable components (see also Figure 1).

Again, little is known about such applications in practice. However, several related fields describe synthesis strategies that have proven successful in generating sustainable outcomes in business. The most well-known example of the synthesis strategy is the auditing and reporting of the three corporate sustainability priorities (the TBL), which prescribe not only economic, but also social and environmental objectives in order to achieve sustainable development (Dyllick and Hockerts 2002; Elkington 1997; Marcus and Fremeth 2007). Other examples include using predetermined profitability levels for business, or using sustainability charters that determine project viability through ongoing reporting about sustainability measures (Bryson and Lombardi 2009). The use of decision-making criteria that merge the three corporate sustainability priorities is also common and includes methods such as multi-criteria decision-making (Pohekar and Ramachandran 2004), values-sensitive design (Borning, Friedman, and Kahn 2004), and the sustainable interaction design (Blevis 2007). These methods adopt a synthesis of the corporate sustainability priorities and have shown a degree of success in delivering distributive equality, albeit with marked negotiation difficulties and some noted inconsistencies in distributive outcomes (Bryson and Lombardi 2009).

The three tension management strategies offer theoretical promise, even though several questions remain about tension management in practice, such as the frequency of the deployment of the distinct tension management strategies or the extent to which each strategy may promote corporate sustainability. Thus, in our study, we investigate the following research

questions pertinent to the literature on tension acknowledgment, tension management, and corporate sustainability:

1. *Do tension acknowledgment and/or tension management result in improved outcomes in corporate sustainability? If so, how?*

2. *What role do the three tension management strategies play? What strategies are deployed most commonly?*

METHODOLOGY

The research strategy sought to survey an industry in which sustainability concerns are generally salient and, within that industry, distinguishing those organizations and managers that excel at corporate sustainability from those organizations and managers whose sustainability performance was less noteworthy. Then, the two performance groups were compared with respect to manifestations of tension acknowledgment and tension management. Choosing an industry with relatively high salience of sustainability concerns was important so that the three sustainability priorities (economic, social, and environmental) had to be faced by managers. If tension management traits are related more closely to the group that performs better at corporate sustainability, compared to the group that shows lower corporate sustainability performance, then this will provide an initial indication that tension management principles and practices may aid in developing effective corporate sustainability outcomes.

To match this requirement, we chose the Australian forestry and wood-products industry as the research setting. To add to the goals of understanding tension management, this industry was an appropriate context because social and environmental performance are both regulated by government and expected by the Australian public, making sustainability practices easier to identify, characterize, and understand for external researchers. Additionally, corporate sustainability performance of the organizations within the industry has varied, with a number of organizations providing strong social and environmental contributions to the industry and

wider public, whereas the industry also hosts a number of organizations that do not make such contributions. Grouping and comparing stronger performers with those operating in line with the status quo, and analyzing the difference in how paradox and tension are viewed and acted upon in both groups, can also provide additional insights as to whether tension management practices are associated with strong corporate sustainability performance or not.

The industry has four distinct levels: Level 1 is forest managers, Level 2 primary processors (e.g., sawn timber), Level 3 secondary processors (e.g., paper and printing, panels, and boards), and Level 4 wholesalers. Only Levels 1, 2, and 3 are included in our study due to their proximity to the natural resource.

Research Strategy and Sampling

To address the research questions, our study employed an instrumental multiple case study approach. This approach meets two key demands of the methodology, namely to acknowledge the phenomenon's complexity and to generate robust results for enhancing our understanding of tension management.

The examination of tension management has been framed theoretically by paradox theory: an approach undergirded by an epistemological position of social construction and the interpretivist tradition. Tension management is a highly subjective technique centered on the abstract interpretation of managers, which is both perceived and acted upon by the individual (Smith and Lewis 2011). The field of corporate sustainability currently knows very little about this highly subjective process. We used a qualitative case study approach to allow an in-depth exploration of individual processes within the organizational setting. The in-depth multilevel analysis was well suited to understanding the epistemological complexity surrounding tension management.

Additionally, the instrumental approach to our case studies added rigor to the research process, aiding in the theoretical aims of the research. In contrast to typical case study

approaches, which make case organizations the focal point for analysis, the aim of the instrumental approach was to use multiple cases to draw wider conclusions about theory (Stake 1995; Yin 2014). The chosen design allows for the use of in-depth, qualitative methods that embrace complexity and allow for the deployment of a larger number of case organizations to generate findings that are more robust. Thus, our data collection sought a high number of case studies that resulted in 32 senior organizational leaders being interviewed across a total of 25 organizations in the industry.

Data Collection

Purposive sampling (Teddlie and Yu 2007) was adopted to identify both the organizations and the interview participants. Attempts were made to increase the representativeness of the sample by including participants from small, medium, and large organizations, as well as organizations with varying certification levels and organizations that operated in different segments of the industry. Table 1 summarizes the organizational demographics.

(Insert Table 1 about here.)

The participants targeted for interviewing were either the senior manager or owner of the organization (18 participants), or one hierarchical level removed from the senior manager or owner (14 participants). These participants were identified as being the individuals who deal with corporate sustainability issues and they represent the reality makers of organizations (Fineman 1996; Wright and Heaton 2006). In particular, the 18 primary managers, who were either the owner, managing director, chief executive officer, executive officer, or plant manager (and primary manager of the Australian subsidiary), were directly responsible for the implementation of corporate sustainability practices in their organization, whereas the secondary managers often held key operational positions (e.g., harvesting manager, operations manager) or administrative positions that interacted with and influenced the primary manager's

corporate sustainability strategy. Table 2 provides the job titles or positions for these participants.

(Insert Table 2 about here.)

In-depth interviews provided the basis for primary data collection. The interviews were conducted by phone due to the large geographical separation between different businesses and typically lasted between 45 minutes and one hour. The interview schedule was made of 52 items, and it sought to capture the multi-leveled nature of organizational tensions (Hahn et al. 2015) by applying questions that relate to tension and paradox at each level of the organization (Figure 2).

(Insert Figure 2 about here.)

Industry and organizational level questions began with general queries around sustainability and norms of practice, which then progressed to target tension, contradiction, and paradox. Discussion was held at how tension was managed, both in the industry, and at an organizational level. The individual-level questions discussed tensions that the participant faces personally, and progressed to seek examples and strategies of how the individual managed these scenarios. Within the three sections of the interview, two main types of questions were asked:

Normative questions. These questions were designed to form an understanding of the industry and organizational environment, while providing a setting for better understanding of tensions. This included general questions such as: "Does the culture in Australia promote or deter sustainable practices in business" (Q5) and "What are the main goals and values of your business" (Q15).

Tension management questions. These questions were designed to target specifically the tensions that participants perceived, and the processes that were employed to manage tensions. Organizational level questions included: "Sustainable business typically involves

doing business in consideration of the social environment and the natural environment, while also making money for the business. Do these priorities clash in the daily running of the business?" (Q23). If participants noted tensions, this was followed up with: "How are these tensions managed?" (Q24). This follow-up also was queried at an individual level: "In making daily decisions, are there any tensions you face surrounding sustainability" (Q35); if answered yes, then the next question asked: "How do you manage these tensions?" (Q36). More directed questions concerning personal action also were used: "In the past, what would you say have been the major changes surrounding sustainability that you have driven in the organization?" (Q42).

Together, the normative and tension management questions provided an overview of the industry, organization, and multi-leveled tension perception and management process that took place. The original 52 items were revised to 48 items after piloting, and amendments were made to ensure terms were easily understood by participants.

Before each interview, desk research was conducted to collect secondary data on each participant's organization. This included all publically available information for the organization, which provided further support to corroborate the interviews. In total, 187 artifacts were reviewed in conjunction with independent third-party industry certifications. The documents included:

Organization websites. The organizations websites proved useful for understanding the espoused organizations' positions concerning sustainability. For smaller organizations, the available information on websites often varied and therefore proved less useful.

Organization documents (available from corporate websites). The relevance of organization documents varied on a case-by-case basis. Some organizations posted documents, which showed sustainability practices such as organization environmental policies, annual reports, or how-to guides for forest protection. Other organizations provided documents that

offered no value to the study and often were statements of environmental policy, which had little or no evidence of practice or third-party verification.

Independent third-party certification. This was an important industry consideration, with Australian Forestry Standard (AFS) and Forest Stewardship Council (FSC) certification being the two standards commonly used in the industry. Both are internationally recognized, and the AFS and FSC registers were checked to confirm the membership of case organizations.

Online articles. Sources of these documents varied and included online news reports, magazine publications, and brochures or general publications. In most cases, the documents were written by third parties, or published by third parties, which provided an insight into the view of the case organization through the eyes of others.

Online documents. In some cases, online documents published by related bodies were analyzed. The relevance of these documents, often from public sources or NGOs, varied, and showed either a positive or negative contribution that the organization has made to the industry.

Related websites. Related websites were effective in showing an organization's market scope and focus. Related organizations often discussed case organizations on their websites, showing either product ranges or organization profiles. The related website and the case organization were connected indirectly, so this was typically not useful in understanding contributions to corporate sustainability.

Artifacts that were published by independent third parties (such as industry certifications) and some online documents and articles provided a good measure of organizational corporate sustainability performance. Artifacts published by the case organizations themselves, or by their affiliates, were treated differently and only used to support the primary data that emerged from the interviews.

Coding and Classifications

The data analysis strategy sought to sort interview participants into two groups: one group where performance was more in line with the industry norm or status quo and another group consisting of more effective corporate sustainability performers. For the purpose of this study, an operational definition of each group was developed, as described next.

Status-quo performers. Participants classified as status-quo performers exhibited regulatory observance of corporate sustainability priorities and continued to maintain these responsibilities in line with the status quo. Participants showed little or no evidence of personal corporate sustainability contributions beyond the organizational context in which they operated.

Effective performers. To define effective performance, we drew on the definition by Hahn et al. (2015). which stated the expected outcomes form tension management would surpass the TBL by embracing tensions, not dismissing tensions. In the research setting, all businesses were required to adhere to industry standard TBL practices that were directed through the National Forestry Policy Statement (1992), Regional Forestry Agreements (separate agreements for each state), and the Sustainable Forest Management Framework (2008). To examine beyond TBL performance, the analysis therefore sought evidence of "market-leading" social and environmental performance that went beyond status quo TBL requirements. Rather than seeking to establish causal relationships between perceived tension management and organizational outcomes, this process was done to differentiate stronger (market-leading) performers from status-quo performers as an intra-sample comparison.

To determine what was meant by *market-leading*, we used both organizational and individual measures. The organizational measures held some relevance in assessing individual participants because we were interviewing primary and secondary managers from each organization, as follows:

In terms of organizational measures, just under 9% of the total forestry mass in Australia has received independent third-party certification (Institute of Foresters Australia, 2018), however 68% of the organizations in our study (17 of the 25) were single or dual certified; providing a strong, independent indicator when considering market-leading performance, particularly for primary managers of the case organizations. Additionally, we drew further evidence of organizations which had made beyond-business contributions through mediums such as membership on conservation boards or industry awards for environmental protection.

At an individual level, we had several typologies that drew on documents and interviews that sought to identify market-leading practices, and specific questions that asked for examples of personal sustainability contributions, to which in our analysis, we examined for evidence of embracing tensions to further all three sustainability priorities. Participants were required to detail these activities, and their impact. The status-quo performers often could not site the social and environmental contributions they made, and when they could, in most cases these contributions were examples of following wider (previously established) organizational processes. The effective group, on the other hand, could name multiple examples, with specificity, about what they did and the outcomes of their actions on generating social and environmental value.

The analytic approach used to best form this differentiation was the typology method (Kluge 2000), which splits participants into distinct categories or types based on common and differentiating characteristics (Given 2008). The types in our study were developed through a staged typology analysis process:

Stage 1. Develop native themes from documents (D themes) and interviews (I themes).

Stage 2. Collate themes into type dimensions. Type dimensions are given a score of nil, weak, moderate, or strong.

Stage 3. The scores for the type dimensions are used to determine the effective and status-quo typologies.

Table 3 provides an overview of the themes used, type dimensions rated, and scores needed for the effective and status-quo assignment.

(Insert Table 3 about here.)

The themes (Stage 1) were categorized as either document themes (D Themes)—those themes that emerged from secondary data—or interview themes (I Themes)—themes that emerged from the interviews (classifications shown in Table 3). Both theme classifications underwent content and thematic analysis in several stages. For document themes, artifacts were analyzed visually to build a cumulative coding frame from the first to the last case organization. Redundant codes were removed, followed by documents being re-analyzed under the finalized frame; and frequencies recorded. The frame was developed with an abductive approach, with codes seeking to inform the sustainability and tension management aims of the study. For interviews, recorded transcripts were content analyzed and themes drawn in the same fashion. However, the development of the coding frame was influenced more strongly by the theoretical aims of the study. With the goal of understanding tension management to a greater degree, codes were formed specifically to assess tension acknowledgment, management, and strategies based on the outline provided by Hahn et al. (2015). These codes form the native themes used to inform the type dimensions.

The type dimensions draw on themes to give participants a score for their personal contribution to corporate sustainability, and these scores were used to justify each participant's placement in the effective or status-quo group. Type Dimension 2, which determined organizational effectiveness with respect to corporate sustainability, was used as a secondary source of information to help inform the assignment of the individual typology. A brief explanation of each type dimension is provided below.

Type Dimension 1: Individual sustainability activity. This type dimension demonstrated examples of the interviewed participants making social and environmental contributions to the business through their actions. The theme did not record organizational activity, but sought to understand what contribution the individual had made. This included specific examples of action—either compliance-based or reform activity—to help improve the social and environmental standing of the organization. Typically, if participants gave three to five specific examples of their contribution, then they scored highly. Alternatively, if participants could not name specific examples, they would register a low score. Each participant was provided a score based on the following criteria:

Strong. The participant demonstrated progression of social and environmental value beyond compliance. The participant provided evidence of both engaging in regulated organizational sustainability practices and self-initiated activity to further social and environmental goals.

Moderate. The participant demonstrated willing compliance to social and environmental practices through their actions. The participant engaged in social and environmental aspects aligned with organizational processes, but showed little evidence of self-initiated progression of these goals.

Weak. The participant indicated little social and environmental engagement both within and outside organizational processes.

None. No examples provided of social or environmental activity.

An example of a participant who scored highly is shown below:

"(I've) been proactive with encouraging us to control pine wildlings [...]. Certainly, supported quite strongly the consideration of wildlife above and beyond what used to be the standard practice. The other thing I've done is I've been involved with the improvement of probably three of our plantation paddocks [...]."

(Organization 1, Participant 2)

Type Dimension 2: Effectiveness of organizational corporate sustainability.
Discriminating between effective and status-quo organizations was a process informed by
theoretical framing, third-party sustainability certifications, and ratings assigned by key
document and interview themes. The determination of effective and status-quo organizations
was used indirectly to provide supporting information for the assignment of individual
participants.

Once the effective and status-quo types were decided, the characteristics of each group
were analyzed for similarities. For the tension management aspect of our study, this included
developing and analyzing two further type dimensions: one examining tension
acknowledgment, the other examining tension management activity (e.g., use of specific
strategies outlined before). In the same way, a strong, moderate, or weak rating was assigned
for the prior type dimensions; the same ratings were used for the tension acknowledgment and
tension management type dimensions.

Type Dimension 3: Acknowledgment of tension. This type dimension assessed the
strength with which interviewed participant acknowledged tension between social,
environmental, and economic priorities. This included when the participant stated that tension
exists and described how this affected the business:

*"[Economic, social, and environmental dimensions of performance] are constantly in
tension; it's a difficult task for the business to adjust to. We can have pressure to
support social and the community, but that can cost jobs. On top of that, you need a
compliant product and chain of custody, and that increases cost onto manufacturers."*

(Organization 13, Participant 1)

As a guide for identifying tension acknowledgment, the framework proposed by Hahn
et al. (2015) was used. Participants needed, first, to acknowledge that paradox, tension, and

contradiction exist within their business. Participants also needed to be able to identify where these paradox, tension, and contradiction exist in the business in either business situations or scenarios. Following this, participants needed to describe, or characterize, how opposing priorities influence each other in some way. Participants were ascribed a score based on the following criteria:

Strong. The participant acknowledged, identified, and characterized tensions, and showed historic perspectives or behavior to reinforce their view of tension.

Moderate. The participant acknowledged, identified, and characterized tensions, but offered little explanation.

Weak. The participant acknowledged, identified, and characterized tensions, but gave no explanation.

Nil. The participant stated that there is no tension between priorities.

With this classification, historical events needed to be considered closely because the organization or individual may have taken action to manage historic tensions, which now have produced an organizational environment where tensions are no longer salient. In this situation, tension acknowledgment is still considered to be strong, as the participant had previously acknowledged and understood the tension between social, environmental, and economic aspects of the business.

Type Dimension 4: Level of tension management. This dimension assessed the degree to which historic or current action has been taken to manage tensions. The primary focus of this type dimension was the degree to which the interviewed participant acted upon a perceived tension. In their responses, the participants themselves needed to show a clear link between the tensions they perceived and the strategies they deployed. An example is shown below:

"We had the tension initially [...] when our organization had decided to move to sustainable resourcing, I had to influence the supply chain up and down the line. When we got certified timber coming through, we needed to saturate our yards. We had to influence the customer as well. A push-and-pull scenario."

(Organization 21, Participant 1)

Participants were assigned scores based on the following:

Strong. The participant showed evidence of sustained action to manage social, environmental, and economic tensions.

Moderate. The participant showed evidence of some action to manage varying tensions.

Weak. The participant demonstrated a high level of ambiguity towards tension management, with little evidence of action to manage tensions.

Nil. The participant either did not acknowledge the tension or acknowledged the tension, but showed no action in managing tensions.

The four type dimensions outlined above helped to determine the level of tension acknowledgment and the level of tension management among both the effective and status-quo groups. Additionally, the frequency of mention of each of the named tension management strategies was recorded for each participant and collated for each group, so that conclusions could be drawn regarding the use of each strategy.

FINDINGS

Of the 32 participants interviewed, the data analysis classified 21 participants as effective corporate sustainability managers and 11 as status quo. The high number of participants who registered effective was considered widely representative of the *modus operandi* of the Australian forest and wood-products industry, which demands a high standard of social and environmental performance from businesses. Before introducing the findings

informing tension management, several themes relevant at an organizational level are discussed.

Organizational and Industry Analysis

During data collection, the organizations from where the study participants came also were analyzed. Key characteristics of these organizations were recorded including industry level, the size of the organization, and certification level. Additionally, the analysis sought to differentiate the effective from the status-quo organizations. These industry and organizational characteristics are summarized in Table 4.

(Insert Table 4 about here.)

The organizational analysis illustrates the following trends. First, the industry overall was sensitive to sustainability issues. However, medium to large organizations were more mature in institutionalizing these sustainability values. Second, operators closer to the natural resource (e.g., industry level 1 or 2) were more sensitive toward sustainability issues. This was true for not only individual participants, but also the organizational level. Third, certification was related closely to effective organizations and managers. Fourth, organizational characteristics were aligned closely with individual characteristics. These themes represent characteristics unique to the Australian forest and wood-products industry.

Tension Acknowledgment

The effective and status-quo participant groups were compared for tension management characteristics; with examples of tensions and strategies shown in Table 5.

(Insert Table 5 about here.)

When identifying tensions, participants demonstrated that tension was perceived and described across various areas of the business with the three sustainability priorities underpinning all tensions. These tensions were expressed in various ways. There were multiple examples of tension positioned within varying levels, for example, between parent and

subsidiary or between staff and the executive board. In terms of context, we found that temporal considerations (short vs. long term) were pertinent particularly considering the environmental concerns surrounding the industry, shaping many of the tensions described. Spatial context also had some relevance. For example, the effects of buying timber from overseas suppliers where there are questions about the equitability concerning the sourcing of that timber (O18), but in an industry primarily located in a developed country, the relevance of spatial considerations was not as strong as temporal.

For the two type dimensions that measure a participant's degree of tension acknowledgment, participants were assigned a strong, moderate, weak, or nil rating. Each rating was quantified: strong ratings given a 3, moderate 2, weak 1, and nil 0, with the averages for each group displayed in Table 6.

(Insert Table 6 about here.)

From the analysis above, several key themes emerged concerning tension management. Tension acknowledgment occurred across both the effective and status-quo group. In the status-quo group, three participants registered 'strong' for tension management, one 'moderate', three 'weak', and four 'nil', whereas for the effective group all participants registered strong ratings. Participants openly acknowledged tension within their business, stating that, particularly, environmental and economic concerns were at odds with one another in a forestry organization. Interestingly, the status-quo group acknowledged tensions in a similar vein to the effective group. When asked if the sustainability priorities are in tension:

"They [i.e., sustainability priorities] are constantly in tension, it's a difficulty for the business to adjust, we can have pressure to support social and the community, but that can cost jobs, on top of that you need a compliant product and chain of custody and that increases cost onto manufacturers."

(Organization 13, Participant 1, status-quo participant)

To varying levels of detail, participants discussed tension within their businesses and within the industry, with a focus around the felling and regeneration of plantations, management of natural forestry resources, certification, staffing, transportation and processing aspects of the businesses receiving most attention:

"You can do things cheaply if ya' not watching the environmental impacts all the time. Sometimes, the biggest problem is the outside organizations where landowners allow contractors to harvest the land, and they don't look at the sustainability of the forest"

(Organization 12, Participant 1)

"To get your environmental practices, you need staff on-board to take you to that direction and where you want to go."

(Organization 22, Participant 1)

Participants critiqued the interplay of these tensions, describing how their environmental positions had economic implications, and *vice versa*. Although tension acknowledgment was relatively common across both groups, the effective group as a whole exhibited a stronger and more consistent acknowledgment of tension among most managers, whereby most status-quo managers showed moderate levels of acknowledgment, with a portion of this group showing little or no acknowledgment.

The major difference between the effective and status-quo groups was not in the acknowledgment of tension, but in the level of action taken in response to tension (level of tension management). The effective group averaged 2.86, illustrating that most participants showed strong tension management, whereas the status-quo group averaged 0.55, thus showing only a nil or weak rating for tension management. The effective group, once acknowledging that tension was present, would give multiple detailed examples of how they effectively managed the tensions they described across the planation, certification, transportation, and processing aspects they previously mentioned. In contrast, the status-quo grouping would offer

reasons why action was not taken, mentioning key barriers or simply trying to deflect the issue because of daily pressures. For example, when asked how the participant deals with clashes between sustainability priorities:

> *"Either ignore them, or if you can't ignore them, we use legal remedies or yeah we just try and deflect it the best we can really."*

(Organization 9, Participant 1, status-quo participant)

For the status-quo grouping, the presence of tension proved to be a barrier, whereas the effective group saw tension as an opportunity to enact their position on sustainability:

> *"We tend to take low paid jobs to keep our ethical standards. We all have our own forestry history, and know what we want to do."*

(Organization 12, Participant 2, effective participant)

Whereas tensions were commonly acknowledged, the responses indicated that the key difference between the status-quo and effective groups lay in the decision to pursue these tensions or not.

Tension Management Strategies

Synthesis was the most common tension management strategy cited, with 18 participants using synthesis, six using acceptance, and three referring to separation. Throughout the interview, participants were asked whether there was tension between the economic, social, and environmental priorities in their business. If participants said that tension was present, they were asked how they managed this tension. The response was matched to a tension management strategy, the results of which are shown in Table 6. This table illustrates the number of participants who cited using each strategy, rather than the frequency or number of strategies that were cited.

Throughout the interviews, participant responses to tension were compared with each of the previously specified tension management strategies. Examples of each are provided below.

Acceptance strategy

The interviews identified six participants who used acceptance strategies. The quote below describes how a participant sources their timber for manufacturing, stating that the timber source is sustainable, but that the transportation process to get the timber to their site is not:

> *"We're not in a position to spend $60,000 to buy a more sustainable truck […]. I'm making a premium product from sustainably sourced timber."*

(Organization 17, Participant 1)

Acceptance strategies were described by participants in a similar fashion in that one end of the tension was relatively immovable, while the other end the participants could change to deliver stronger social and environmental performance. Examples varied. One small scale boutique furniture operator refused certification to improve environmental performance because of the high costs involved. However, this operator had committed the business to using high-quality structural veneers, which are all sourced from off-cuts, reducing overall waste (Organization 2, Participant 1). Another participant, acknowledging the social disruption that their operation caused in the small town in which the business operates, compensated by stating that the organization adopts class leading human resource practices to protect and reward the staff they employ from that town (Organization 4, Participant 1). Despite these examples, the open acknowledgment of tensions and use of acceptance strategies were rare.

Separation strategy

There were three participants who cited using separation strategies. The below quote is from the primary manager of a manufacturing business owned by an overseas parent. The

parent requires the newly acquired subsidiary to keep varying sustainability standards; however, the manager is charged primarily with increasing output (Organization 13, Participant 1):

> To address economic value, *"….we don't have barriers to sustainability as we are required to be sustainable in our forestry practices….we are trying to deliver a much larger volume, deliver in the most efficient method….but on top of that are asked to comply with product and chain of custody that increases the cost."*

'Participants citing separation strategies openly stated that they could not address all sustainability criteria in the same scenarios as they would like to, but instead sought to make contributions in different areas of the business to progress social and environmental priorities across varying locations or in varying timeframes.

Synthesis strategy

There were 18 participants who cited using synthesis strategies, making it the most common strategy used. A common theme that emerged from participants, who were discussing synthesis strategies, is that the approaches they were describing encompassed holistic measures that resolved situational-based tensions that they observed within their organizations. This included measures such as reforms to organizational structures, certification, buying strategies, and general operations that would perpetuate sustainability:

> *"[…] Our organization had decided to move to sustainable resourcing (certified timber)."*

(Organization 21, Participant 1)

These measures were a form of resolution in that a single strategy was taken to resolve a salient tension. Following this, participants would describe subsequent steps taken that demonstrated a cycle of consistent improvement:

"When we got certified timber coming through [...] [w]e had to influence the customer as well. A push and pull scenario. From an economic point of view, we needed to manage the consequence of not being accepted by the industry. We were also able to help our customers improve their green ranking. We also had to train staff, I implemented (the) first training programs, and other training programs were developed."

(Organization 21, Participant 1)

The pattern described above was common among participants, whereby a measure would be taken to fix a structural or core business issue, and then subsequent challenges would emerge to which new actions would be required. In Organization 12, participants described how its members consciously chose a not-for-profit structure to avoid the motivation to engage in negative short-term profit-seeking forestry practices in the future. This resulted in the need to develop a series of policies and procedures around contract acceptance, remuneration, and output expectations in the following years to protect the organization's original intentions. Another example is Organization 8, which was the first organization to win a sustainability-based award and certification in its sector. Once committed to revolutionary harvesting and replanting techniques which they made known to the community, Organization 8 subsequently was faced with a series of tensions around staff remuneration, which subsequently resulted in the development of staffing policies to resolve.

The cycle of new tensions emerging after prior tensions were addressed was a process consistently underlined by the general tension between economic, social, and environmental factors. These factors, shaped by issues of level and context, consistently underpinned the process. However, from the view of the participant, this process involved resolving key tensions, which they perceived would then result in the emergence of new tensions that were created in the post-implementation business reality. The emergence of these newly perceived

tensions subsequently would evoke the formulation and deployment of, more often than not, another synthesis-based strategy.

DISCUSSION

Our empirical study of tension management in more or less sustainable organizations support our claim that tension management is aligned closely with integrative and effective corporate sustainability outcomes. Our results also shed some light on the construct of tension management, namely, that there is a pragmatic delineation between tension acknowledgment and the use of tension management strategies. When deploying strategies to manage tensions, synthesis was shown to be the most common approach in practice although the application of synthesis differs from the current understanding in theory. We discuss the implications of these findings below.

Corporate Sustainability and the Constructs of Tension Management

As outlined earlier, recent work by Hahn and colleagues (2015) argued that tension management would lead to integrative corporate sustainability and improved outcomes for the social and environmental priorities in business. Previously, there has been little empirical work to support this claim. However, our findings hint at the existence of an association between tension management and effective corporate sustainability. Although our study stops short of claiming any causal relationship between the two, the findings show that tension management has a strong association with those managerial activities that manage social and environmental priorities in the business effectively.

At the same time, the study indicates that the acknowledgment of tension is a stage separated from the choice to engage, act upon, and manage the perceived tension. The process of identifying tensions was aligned closely to the claims of Hahn et al. (2015) whereby social, environmental, and economic factors would underpin tensions that manifest based on varying levels and context. However, the identification of tension was not limited to integrative actors

alone, as claimed by these researchers. Although, in our study, the acknowledgment of tension was much stronger among the effective group, the status-quo group also showed tension acknowledgment among many of the participants who openly stated that they recognized the tensions between economic, social, and environmental priorities within their business. When analyzing how many of these participants acted to manage these tensions, the gap between the effective and status-quo group widened, with the status-quo group demonstrating that they were unwilling to manage the tensions they perceived and typically endorsed profit-oriented behavior despite their espoused paradoxical framing.

The gap between tension acknowledgment and tension management observable in our study was similar to that described by Smith and Lewis (2011), who argued that, once tensions became salient, actors would have the choice to either embrace the tension or reject it. Our study showed that tensions were salient among both groups, but whereas the status-quo group saw the tensions as difficulties, barriers, or challenges, the effective group embraced the tensions. The findings suggest that, at an individual level, cognitive acknowledgment of tension was not the necessary step that preceded tension management; instead, motivational factors may, in all likelihood, have been the most important determinant of employees either embracing or rejecting the perceived tensions. This suggestion is consistent with the theory of planned behavior, highlighting the importance of employee attitudes, perceived social norms, and perceived behavioral controls for explaining the extent to which employees are motivated to engage in proenvironmental behaviors (Ajzen, 1991; Flannery & May, 2000; Lo, 2015; Lo, Peters, & Kok, 2012). In turn, environmental leadership behaviors may affect employees' emotions toward environmental and social sustainability initiatives and, thus, their motivation to manage TBL tensions effectively (Robertson & Barling, 2015).

The tension acknowledgment construct describes the paradoxical cognitive frame in corporate sustainability, which seeks to meet the multiple conflicting goals of social, economic,

and environmental value (Hahn et al. 2014, 2018; Sharma and Jaiswal 2018). Tension acknowledgment is cited as the essential preliminary step to tension management (Hahn et al. 2015) that must be met before tension management proceeds. Recent studies assume a seamless movement between the paradoxical cognitive frame and tension management activity (Hahn et al. 2014, 2018; Sharma and Jaiswal 2018), bypassing the variety of complex social and motivational factors that also may be involved in determining the link between the two. Sharma and Jaiswal (2018) have conducted the only empirical study to date to show the relevance of the paradoxical frame at an individual level, which demonstrates that paradoxical frames are unstable and can morph to business case frames within a period as short as two years. Cognitive frames are fluid, and the assumption that they are fixed is a common mistake made in theory (Cornelissen and Werner 2014).

The weaknesses of cognitive frames may be supported by the inclusion of motivational factors as more proximate determinants of tension management activity. Motivational factors have not been considered in the formulation of tension management theory, but our study suggests that cognitive frames and motivational factors may, in combination, better form the tension acknowledgment construct. In this context, a lot of promising research remains to be conducted—on how, for example, personality traits, leadership influence, and physical workplace environments affect employees' emotions, which may in turn predict employees' motivation levels to manage TBL tensions (see also Lo, 2015; Robertson & Barling, 2015).

The Preference for Synthesis

Our study also showed that the synthesis strategy was most common among those who sought to manage organizational tension. Across each category, the synthesis strategy was cited three times more than the second most cited strategy (acceptance strategy) and six times more than the separation strategy. The type of synthesis shown through the interviews was one that moved to synthesize paradoxical scenarios where managers would move to either combine

differing priorities or change situations in order to move beyond the existing paradox. The movement beyond the existing paradox differs from the form of synthesis described in current tension management theory, which implies that synthesis results in the paradox being maintained following its implementation.

Current theory in tension management assumes a seamless association between abstract and fluid individual-based constructs such as paradoxical cognitive frames and the management of concrete situational tensions within real world scenarios (Hahn et al. 2014, 2015, 2018). This seamless association between abstract cognitions and physical scenarios has been the basis of the prescribed tension management strategies, namely acceptance, separation, and synthesis (Hahn et al. 2015), all of which prescribe maintaining paradox within real world situations. The theoretical bind between a manager's paradoxical frame and management processes, therefore, deduces that resolution in any form is antiparadoxical and, therefore, associated with the business case for sustainability. Our study, however, suggests differently that individuals manage tensions through a process of ongoing resolution of abstract paradoxical cognitions and motivations.

The effective group within our study showed strong paradoxical cognitive frames, but little interest in the maintenance of real world, scenario-based paradox within their organizational processes. Once tensions became salient, the effective group took measures to resolve the tensions that were present within the scenario. The effective group demonstrated that this process was repeated, consistently, over the history of the business, mimicking that described by Smith and Lewis (2011), who stated the choice to act upon and continually resolve tensions would begin a virtuous cycle of continuous improvement. Our findings, therefore, suggest that for individuals a paradox exists within their abstract ideals, personal values, motivation, and cognition, but that they view the management of context-dependent tensions as an ongoing process of resolution.

This phenomenon of resolution and continuous improvement is explained through wider theories of organizational paradox (Benson 1977; Omanovic 2009). Organizational paradox has been proposed as a series of temporal structures, created and upheld by the interests of organizational actors. Interests can include, for example, the multiple conflicting priorities of sustainability, which individuals hold. These interests, within an organizational scenario, can create temporal tensions, as the interests of actors clash with the organizational reality that surrounds them. Acting upon their interests, individuals can reshape their organizational realities to solve salient tensions. However, within the new organizational structures, which are formed, new contradictions and tensions emerge that did not exist previously. Following through on their interests, actors that then repeat this process of resolution develop a pattern of continuous improvement, matching the virtuous cycle of improvement proposed by Smith and Lewis (2011).

The view of continuous improvement is an alternative path to tension management, a view that is lodged in the perspective of managers implementing tension management strategies. In addition to reducing rather than increasing cognitive complexity for organizational managers within real world scenarios (Beech et al. 2004), the process of continuous resolution may be preferred because it delivers substantial social and environmental value. The measures taken in our study include a series of widespread and ongoing organizational reforms. Our critique of acceptance and separation strategies is that they may not address organization-wide phenomena, instead often focusing on minor issues outside of normal organizational processes. These strategies, therefore, do not create the meaningful social and environmental contributions that are desired by managers with a strong paradoxical position. The synthesis through resolution, however, was shown to reform continuously the central functions of the business in our study, subsequently generating greater social and environmental value.

CONCLUSIONS

The role of tension management in generating integrative outcomes has remained undiscovered in practice, with little known about its relevance or application within the corporate setting. The individual-level application in our research went some way toward validating the relevance of the theory at a behavioral level, showing that the theory has the potential to generate positive social and environmental outcomes in business, thus supporting the integrative view of corporate sustainability.

In operationalizing the integrative framework of corporate sustainability, the synthesis strategy seemed to resonate most with managers. Based on this finding, we recommend the synthesis strategy option when introducing tension management to virgin settings. The acceptance and separation strategies were not utilized widely by managers. It is believed that the increased cognitive complexity caused by these strategies, in addition to the lower social and environmental contribution generated, makes the use of these practices less attractive. This needs not deplete the value of these strategies, although we suggest they are more suited to *ad hoc*, targeted strategic implementations.

Ultimately, the implementation of any sustainability strategy into business practice boils down to executives' ethical value choices. At present, there is broad consensus among academic, business, and political elites that approaches to sustainability and/or sustainable development will result in a better world. However, any business ethicist should not ignore the fact that commitment to any sustainability agenda such as Agenda 2030 represents an ideological perspective to design consciously (of largely collectivist and technocratic principles of sustainable development by global institutions such as the UN) rather than a free-market economist's commitment to freedom, individualism, and the spontaneous emergence of order through market forces and traditions (e.g., Hayek 1958, 2001, 2011, 2014). That intellectuals and academics have a strong preference for the collectivist-technocratic end of the ethical pole

rather than the individualist-libertarian end is no surprise (Hayek 1948; Nozick 1997; Orlitzky 2015; Schumpeter 1947). Yet, whenever commitments to sustainable development harm, for example, the poor (e.g., by increasing the prices of electricity and a wide range of consumer goods; see, for example, Easterly 2014), it is time to initiate an ethical debate about the values inherent in this sustainability movement with a strong affinity to socialist notions of justice and equity (Hopwood, Mellor, and O'Brian 2005; Orlitzky 2015). In some ways, such critical re-examination of the ethical and ideological foundations of sustainable development also is consistent with the integrative framework of Hahn et al. (2010), as it rejects the win-win capitalist paradigm of corporate sustainability.

Future Theoretical and Empirical Research

In addition to our empirical contributions, this study has revealed wider implications for the future theoretical development of the integrative view and tension management in corporate sustainability. Our research is a preliminary attempt to move a mostly organization-level discussion to achieving integrative corporate sustainability to the level of the individual manager responsible for sustainability activities within an organization.

Our findings indicate that managers' cognitive capacity to acknowledge tensions between economic, social, and environmental priorities is a process that most participants experienced, showing widespread acknowledgment of corporate sustainability issues amongst both effective and status-quo participants. The widespread acknowledgment of tension supports the view of Hahn et al. (2015) that the concurrent advancement of sustainability priorities is unrealistic in many circumstances, and that these priorities regularly clash and form tensions. However, only those priorities considered effective at corporate sustainability acted to resolve these tensions. The caveat to this point is that the study was conducted in an industry that is sensitive to sustainability, and the findings should be considered within this context, which elicits higher awareness of sustainability issues compared to other industries. However,

the research went some way to go beyond awareness to target acknowledgment, by assessing participants' ability to not only acknowledge, but also identify and describe the interaction between opposing sustainability priorities as described by Hahn et al. (2015). The case-study approach, though, means that this finding is specific to industries with high sustainability considerations, calling for further examination in varying contexts.

The phenomenon of high performers being separated by tension management action rather than acknowledgment highlights different levels of individual motivation and ethical outlook, which, additional to the organization-level enablers, encourage prosocial and proenvironmental responsibility, values, and behaviors. This suggests that, although the integrative and instrumental framework, which underscores tension management theory, is useful for organization-level generalizations, the individual-level distinction still needs to be addressed to aid future theoretical development. We regard this as an important research contribution, presenting future researchers with an even more complex challenge to the development of the theory than has thus far been attempted.

From a strategic perspective, our findings indicate that at the individual level managers' preference for how to manage tension differs from that prescribed in current theory. The preference to synthesize different interests rather than apply the approach in current theory, which seeks to maintain paradox, indicates that the management approaches for dealing with paradox require further examination at the individual level. The applicability and usefulness of tension management strategies need to be mitigated against the psychological and behavioral preferences of managers and, although our study provided initial insight into these areas, further research is required.

For the industry under examination, the findings provided explanatory illustrations to variances, which are seen in the corporate sustainability performance of different forestry businesses in Australia. Under the guide of a national framework to protect the forestry

resource in Australia, participants viewed further social and environmental contribution differently. Whereas status-quo performers viewed further social and environmental contribution as a barrier, and an unnecessary challenge associated mainly with cost implications, high performers were guided by an ethical platform that dictated environment and social contribution. For high performers, this provided a perceived social license for operating in the sector, and was incorporated into their branding and customer messaging. The study indicated that the operationalization of these principles was aligned closely with central tension management principles. This indicates potential for such strategies to be applied more broadly within the industry. However, the study clearly demonstrated that such strategies first must be preceded by the cognitive acceptance of social and environmental tensions within their businesses.

To continue the examination of its application, further empirical work surrounding specific tension-mapping processes, isolating, and quantifying the success of each strategic implementation is required. Our study examined practices naturally occurring within organizations. Other empirical studies in different industries are necessary to provide further empirical support for the refinement of the original theory and to provide the potential to develop more tension management theory. Our study has contributed to this objective and supports the integrative view of corporate sustainability as theorized by Hahn and colleagues (2014, 2015).

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Table 1:

Organizational Demographics

Code	Industry (Primary, *Secondary)*	Employees	Certification	Documents/Artifacts Analyzed
O1	*Level 1*, Level 2	20	Single	Organization website (including two organization documents), one online document, three related websites.
O2	Level 3	5	None	Organization website, three related websites
O3	*Level 1*, Level 2	35	Dual	Organization website (including four organization documents), parent organization website, three online articles, one government document.
O4	*Level 1*, Level 2	130	Dual	Organization website (including four organization documents), two online documents, three related websites.
O5	Level 2	420	Dual	Organization website (including five organization documents), three online documents, three related websites.
O6	Level 1, *Level 2*	500	Single	Organization website (including three organization documents), annual report, two online articles.
O7	Level 1	11	Single	Organization website (including one organization document), one government document, three online articles.
O8	Level 1, *Level 2, Level 3*	5	Single	Organization website (including one organization document), three related websites, one blog, two online articles.
O9	Level 1	6	None	Organization website (including four organization documents), one online document, three related websites.
O10	Level 1	2	None	Two online documents, two related websites.
O11	Level 1	1	None	Organization website, four online documents.
O12	Level 1	12	Single	Organization website (including one organization document), three online documents, three related websites.
O13	Level 3	100	Dual	Organization website, three online documents, four related websites.
O14	Level 3	40	Dual	Organization website (including six organization documents), three related websites.
O15	Level 1, *Level 2*	310	Dual	Organization website (including seven organization documents), one online document, five related websites.
O16	Level 1, *Level 2*	15	Single	Organization website (including one organization document), four online documents, four related websites.
O17	Level 3	2	None	Organization website, two online documents, three related websites, one Facebook page.
O18	Level 3	8	Dual	Organization website (including five organization documents), four related websites.
O19	Level 2	2	None	Three online documents, one related website.
O20	Level 3	45	Dual	Organization website (including nine organization documents), one online document, five related websites.
O21	Level 3	129	Dual	Organization website (including four organization documents), one online document, six related websites.
O22	Level 2	5	None	Organization website, two related websites.
O23	Level 2	100	Single	Two online documents, three related websites.
O24	Level 3	5	None	Organization website (including one organization document), four related websites.
O25	Level 1, *Level 2*	60	Single	Organization websites (including six organization documents), two online documents, one YouTube clip.

Table 2:

Participant Demographics

Respondent	Position	Interview Length
O1P1	Managing Director	90 minutes
O1P2	Business Development Manager	63 minutes
O1P3	Harvest Manager	37 minutes
O2P1	Owner	70 minutes
O3P1	Chief Executive Officer	60 minutes
O4P1	External Relations Manager	54 minutes
O4P2	Environmental and Cert Manager	53 minutes
O5P1	Chief Executive Officer	59 minutes
O6P1	Certification Manager	55 minutes
O7P1	Regional Manager	57 minutes
O7P2	Technical Services Manager	56 minutes
O7P3	Managing Director	24 minutes
O8P1	Owner	64 minutes
O9P1	Head Forrester	61 minutes
O10P1	Owner	49 minutes
O11P1	Owner	50 minutes
O12P1	Executive Officer	52 minutes
O12P2	Operations Manager	53 minutes
O13P1	Plant Manager	46 minutes
O14P1	Technical Consultant	52 minutes
O15P1	Sustainability Forester	52 minutes
O16P1	General Manager	62 minutes
O17P1	Owner	20 minutes
O18P1	Managing Director	49 minutes
O19P1	Owner	46 minutes
O20P1	Operations and Supply Manager	40 minutes
O20P2	Production Coordinator	47 minutes
O21P1	Marketing/Sustainability Manager	52 minutes
O22P1	Owner	55 minutes
O23P1	Managing Director	50 minutes
O24P1	Owner	10 minutes
O25P1	Managing Director	31 minutes

Table 3:

Themes and Type Dimensions

Type Dimension (TD)	Ratings for Those who were Classified as Status Quo	Mandatory Rating to be Considered Effective
TD 1. Individual sustainability activity	**None, weak, moderate**	**Strong**
Themes used to determine the typology: D8. Documents mention personal contribution to sustainability I5. Showed evidence of sustainability activity I6. No evidence of sustainability activity		
TD 2. Effectiveness of organizational corporate sustainability	**Status-quo or Effective**	**Status-quo or Effective**
Themes used to determine the typology: D1. Certification/sustainability given a separate tab (Website only) D2. Overall 'green' theme of the website D3. Mentions, but no strong promotion of sustainability D4. Environmental/social organization goal D5. The organization has AFS certification D6. The organization has FSC certification D7. Evidence of social/environmental contribution beyond business reasons I1. Social/environmental sustainability part of organizational goals I2. No social/environmental aspect to organization goals I3. Social/environmental progression beyond business plan I4. Social/environmental as part of business plan		
TD 3. Acknowledgment of tension	**None, weak, moderate**	**Strong**
Themes used to determine the typology: I9. Identified tension between CS factors I10. Stated no tension exists I13. Tension noted, action taken I14. Tension noted, but ambiguous in response		
TD 4. Level of tension management	**None, weak, moderate**	**Strong**
Themes used to determine the typology: I13. Tension noted, action taken I14. Tension noted, but ambiguous in response I15. Opposition strategies used to manage tension I16. Separation strategies used to manage tension I17. Synthesis strategies used to manage tension		

Table 4:

Demographics of the Case Organizations

| Category	Effective Group (*n* = 21)	Status-Quo Group (*n*= 11)
Industry Characteristics *All statistics are frequencies*		
Industry Level 1 (forest management)	10 (47.6%)	3 (27.3%)
Industry Level 2 (primary processors)	7 (33.3%)	3 (27.3%)
Industry Level 3(secondary processors)	4 (19%)	5 (45.5%)
Organizational Characteristics *All statistics are frequencies*		
Size – Small (0-10 employees)	4 (19%)	6 (54.5%)
Size – Medium (11-99 employees)	10 (47.6%)	4 (36.4%)
Size – Large (100+ employees)	7 (33.3%)	1 (9.1%)
Certification – None	2 (9.5%)	6 (54.5%)
Certification - Single	10 (47.6%)	3 (27.3%)
Certification - Dual	9 (42.9%)	2 (18.2%)
Organizational Performance – Effective	21 (100%)	5 (45.5%)
Organizational Performance – Status Quo	0 (0%)	6 (54.5%)

Table 5:

Examples of Tensions and Strategic Responses

Tension	Characterization: Logic	Acceptance Strategy	Separation Strategy	Synthesis Strategy
Standardization and efficiency vs. advancing environmental and social practices	Managing forestry operations requires the standardization of practices to streamline operations and improve efficiency, however also adaptability to the ever advancing environmental and social norms at a systemic level that reform existing industry practices.	Regional managers were required to deliver monthly reports on output-based performance targets. However, a separate set of qualitative Stewardship Goals were established targeting social and environmental factors to which managers needed to report on at a quarterly basis (O4)	The transportation of felled logs offsite was outsourced for efficiency purposes, so that the organization's managers could focus on advancing plantation management practices (e.g., reforming pesticide use, advanced seed diversification practices) to progress their environmental contribution (O16)	The organization chose to adopt and sustain gold-standard third-party certification practices, which are frequently updated with industry advancements, and required managers to implement practices that concurrently progress all sustainability goals (O1)
Short-term financial governance vs. long-term environmental and social governance	Governance in forestry businesses often has to balance the need for short term profit, with the responsibility of long term environmental and social goals. The organizations' structure and approach reflect this tension in various ways.	The organization remained profit-priority, however established an internal advisory group to formulate, develop, and recommend sustainability initiatives for the Executive Board to incorporate into business operations (O6)	The overseas parent organization was responsible for tracking, understanding, and directing sustainability practices for the Australian subsidiary organization to follow, while the subsidiary's manager focused on efficiency, production, and output (O13)	The organizations' governance structure was changed to "not-for-profit", so to relieve the need for immediate short-term financial gains, allowing the organization to adopt a long-term view on environmental conservation within its business practices (O12)
Core business activities vs. local community engagement	Like any business, forestry organizations must direct capital towards core business processes in order to generate cash flow for continued operations. However, in the forestry industry, local stakeholders who are directly effected by forestry operations (e.g., local communities, local government, other businesses) expect various degrees of engagement to justify forestry organizations' presence in their community. This applies a strain on forestry organizations who must balance their focus and investment between core business operations and local community engagement.	In addition to its responsible forestry practices, the organization established a "Good Neighbor Charter" that was published on its website, which committed to make a series of contributions, while operating in a local community (e.g., sharing boundary management costs). In addition to normal operations, regional managers would be required to implement the Charter (O25)	Separate from the forestry operations taking place in regional communities, the organization established a Public Relations Department (two staff maximum) at their city headquarters whose role it is to tailor messaging and communicate with regional stakeholders (O18)	Upon establishing market leading forestry process, the organization owners transparently involved their local community in their core business practices by establishing a local forestry network made up of community members who would frequently review the organizations' core operations and long term plans (O8)

Table 6:

Tension Management Characteristics of Each Group

Category	Effective Group (*n* = 21)	Status-Quo Group (*n* = 11)
Tension management type dimensions (averages)		
TD3: Level of tension acknowledgment	3	1.27
TD4: Level of tension management	2.86	0.55
Number of participants who used each strategy (participants can use more than one strategy)		
Acceptance	6 of 21 (29%)	0 of 11 (0%)
Separation	3 of 21 (14%)	0 of 11 (0%)
Synthesis	18 of 21 (85%)	2 of 11 (18%)

Figure 1:

Tension Acknowledgment and Tension Management
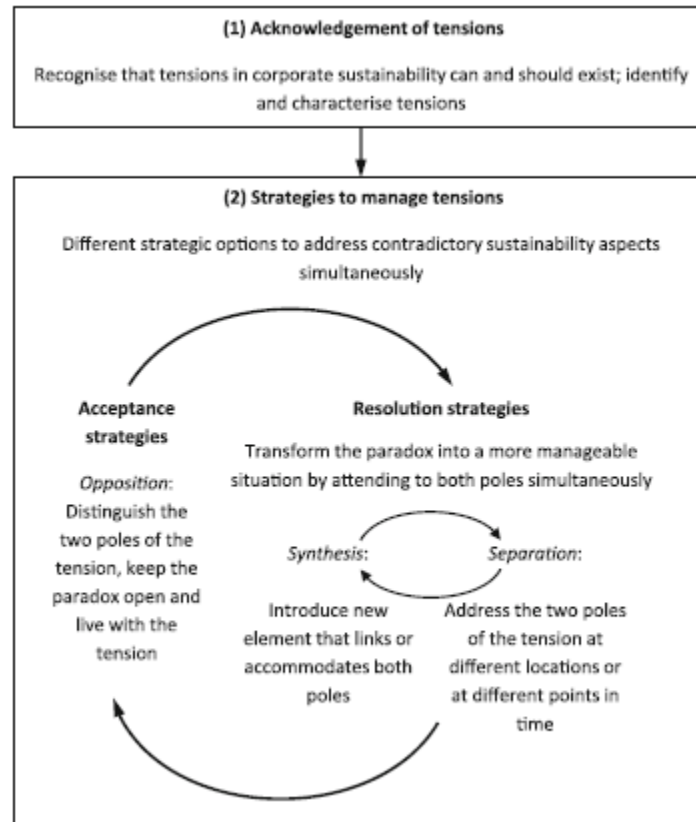
Reproduced from Hahn et al. (2015, p. 300).

Figure 2:

Tension and Paradox at each Level of the Organization

1.0 Industry/societal-level questions 1.1 Industry/societal norms 1.2 Tensions/paradox/contradiction
2.0 Organizational-level questions 2.1 Organizational norms 2.2 Tensions/paradox/contradiction
3.0 Individual-level questions 3.1 Personal tension 32. Evidence of retrospective/current   tension management