



Developing consumers' paradox mindsets: Making sense of tensions in sustainability

Claire Beach¹ · Sitong Michelle Chen² · Michael S. W. Lee¹

Received: 31 March 2024 / Accepted: 29 April 2025
© The Author(s) 2025

Abstract

Greening, or adopting sustainable business practices, requires firms to balance economic, environmental, and social goals, which often creates tensions in sustainability. Firms frequently employ paradoxical logic to manage these tensions, pursuing these objectives simultaneously and without prioritization. However, using paradoxical logic may make it difficult for firms to communicate their greening initiatives to consumers. Messages that conflict with consumers' existing mental frameworks may amplify perceived tensions, arousing cognitive dissonance. Consumers with limited paradox mindsets may be unable to make sense of these tensions or tolerate their cognitive dissonance, prompting them to avoid or exit the firm or question its commitment to greening. To reduce these risks, greening firms need to consider and actively develop consumers' paradox mindsets when crafting their sustainability communications. This paper draws on connections between cognitive dissonance and sensemaking to develop a conceptual model that illustrates how greening firms can develop consumers' paradox mindsets. Through this iterative process, firms challenge consumers' existing mental frameworks and offer sense-giving narratives that reframe tensions in sustainability as interdependent and complementary, reducing consumers' cognitive dissonance. By tailoring their messages to align with consumers' varying receptivity to paradoxical logic and sensitivity to tensions in sustainability, greening firms can craft coherent narratives that promote consumer engagement with the sensemaking process. When this process is successful, greening firms can develop consumers' paradox mindsets and, thus, their ability to make sense of tensions in sustainability. This paper extends the literature on paradox mindset development from managers and employees to firm-consumer communications.

Keywords Greening · Tensions in sustainability · Cognitive dissonance · Sensemaking · Paradox mindset

Introduction

A recent report by the World Economic Forum found that 60% of the firms surveyed were engaged in greening (Rafi, 2022), which is a long-term process “of becoming sustainable” (Cekanavicius et al., 2014, p. 76). Greening involves adopting sustainable business practices that improve a firm's

social and environmental impact (Ortiz-De-Mandojana & Bansal, 2016), requiring firms to balance economic, social, and environmental goals. These competing demands generate tensions in sustainability, highlighting the complexity of greening and the trade-offs greening firms must navigate (Hahn et al., 2015; Livonen, 2018).

Firms can manage tensions in sustainability using hierarchical or paradoxical approaches, reflecting the cognitive frames managers use to make sense of tensions in sustainability (Sharma & Jaiswal, 2018). The hierarchical approach resolves tensions by prioritizing one goal—usually economic—over the others, creating a clear decision-making process (M. S. Chen & Eweje, 2022; Epstein et al., 2015) but often sacrificing long-term sustainability and innovation (Slawinski et al., 2024). In contrast, paradoxical approaches acknowledge tensions as “interrelated yet conflicting” concerns (Hahn et al., 2018, p. 237), encouraging the pursuit of multiple sustainability goals simultaneously and without

✉ Claire Beach
claire.beach@auckland.ac.nz

Sitong Michelle Chen
michelle.chen@aut.ac.nz

Michael S. W. Lee
msw.lee@auckland.ac.nz

¹ Department of Marketing, University of Auckland, Auckland, New Zealand

² Department of Marketing and International Business, Auckland University of Technology, Auckland, New Zealand

prioritization. The paradoxical approach enables firms to generate greater value, achieve competitive advantages, and make meaningful contributions to sustainable development (Hahn et al., 2015, 2018).

Central to this approach is the paradox mindset, which is defined as an individual's capacity to accept, integrate, and make sense of contradictory yet interrelated elements (Miron-Spektor et al., 2018; Praszquier et al., 2022). Existing research has focused on developing paradox mindsets among managers and employees and their ability to navigate tensions within firms (e.g., Knight & Paroutis, 2017; Rosing et al., 2011). However, less is known about how firms can achieve this among consumers, who may encounter the paradoxical logic embedded in the greening process through the firm's sustainability communications.

Sustainability communications may highlight the complexity of sustainability initiatives and increase the saliency of tensions in sustainability. When consumers struggle to make sense of these tensions, they may experience psychological discomfort, known as cognitive dissonance (Festinger, 1957), which can lead to accusations of greenwashing. Lyon and Montgomery (2015) define greenwashing as “any communication that misleads people into adopting overly positive beliefs about an organization's environmental performance, practices, or products” (p. 226). Even when unintentional, greenwashing damages a firm's reputation and credibility (Keilmann & Koch, 2024).

For example, Nespresso, known for its premium coffee pods, partnered with the Rainforest Alliance in 2003 to launch its AAA Sustainable Quality Program (Nespresso, 2024). Initially focused on supporting environmental and socio-economic sustainability for coffee growers, the program has since shifted towards regenerative agriculture and circularity (Ludmir, 2023; Nespresso, 2022a). However, tensions have surfaced throughout Nespresso's greening process, and the firm has faced accusations of greenwashing, illustrating the challenges in communicating how they balance their existing business practices and greening initiatives (Burrows, 2017).

Some firms attempt to avoid accusations of greenwashing through greenhushing or green blushing by intentionally under-communicating or deliberately avoiding sharing their greening initiatives (Falchi et al., 2021; Font et al., 2017). However, many firms are legally required to disclose their environmental and social governance (ESG) standards (STACS, 2024), while others market their sustainability efforts to gain a competitive advantage (Esty & Simmons, 2011). Consumers are increasingly attentive to such claims: 78% of U.S. consumers consider a sustainable lifestyle important, and products with sustainability claims experience 66% faster growth, which doubles for products with multiple sustainability claims across sustainability dimensions (Bar Am et al., 2023).

This highlights the importance consumers place on sustainability claims and the need for firms to clearly communicate their greening initiatives, particularly when pursuing multiple initiatives that may appear conflicting or as competing priorities. As a result, firms face the dual challenge of mitigating consumer cognitive dissonance while avoiding perceptions of greenwashing. In this context, consumers' paradox mindsets may have “deeper connotations than segmentation or differentiation” (Pang et al., 2022, p. 434). Boemelburg et al. (2023) argue that developing individuals' paradox mindsets can help them make sense of tensions in sustainability, thereby reducing or pre-empting cognitive dissonance.

We seek to contribute to this area of research by asking: *How can firms help develop consumers' paradox mindsets?* Utilizing theorizing (Weick, 1995b) and Nespresso as a case example, we develop a process-oriented model to explain how firms can develop consumers' paradox mindsets through sensemaking. This process helps consumers make sense of tensions in sustainability, reducing their cognitive dissonance. By elaborating on the sensemaking process between firms and consumers, we integrate existing theoretical connections between paradox mindsets and sensemaking (M. S. Chen et al., 2021; Child, 2020; Gioia & Chittipeddi, 1991) and cognitive dissonance and sensemaking (Beverland et al., 2023; Weick, 1995a) into a single conceptual model.

We begin with a brief overview of cognitive dissonance and how it can lead consumers to engage in the sensemaking process. We then theorize how firms can use the sensemaking process to help develop consumers' paradox mindsets. Finally, we discuss the theoretical and managerial implications for greening firms.

Cognitive dissonance

Greening requires managers and employees to balance business-as-usual tasks with adopting sustainable practices, often leading to cognitive dissonance (Rao & Mattarelli, 2023). Cognitive dissonance is the psychological discomfort individuals feel when perceiving inconsistencies between two or more cognitions (Festinger, 1957). For instance, managers may experience discomfort when choosing suppliers that align with their environmental and social sustainability goals without harming the firm's economic sustainability by making products unaffordable to consumers. Similarly, employees may experience cognitive dissonance when their productivity targets, based on traditional business metrics, conflict with the firm's environmental or social standards, creating tensions between individual and organizational goals.

Consumers may also experience cognitive dissonance when perceiving inconsistencies between a firm's economic,

environmental, and social goals and practices. Cognitive dissonance in consumers has been linked to lower satisfaction (Koc, 2019; Oliver, 1987), complaining (Loo et al., 2021; Voorhees et al., 2006), and switching behavior (Dröge et al., 1997; Voorhees et al., 2006). As a result, cognitive dissonance poses a strategic risk for firms whose sustainability messaging fails to align with consumer expectations by reducing customer retention, increasing service costs, and, ultimately, eroding competitive advantage.

The intensity of the cognitive dissonance aroused depends on the distance between the consumers' existing knowledge, values, and beliefs and the firm's communications and actions. Social Judgment Theory (SJT) offers insight into this process. According to SJT, individuals evaluate new information by comparing it with their existing attitudes; firm messaging close to a consumer's views falls into their latitude of acceptance, while conflicting viewpoints fall into their latitude of rejection (Sherif & Hovland, 1961). Messages that consumers find neither acceptable nor objectionable fall into their latitude of noncommitment (Lee & Chung, 2023). Firm communications that fall into the consumer's latitude of rejection are more likely to be perceived as insincere, which may exacerbate their cognitive dissonance or fuel accusations of greenwashing.

However, consumers vary in their ability to tolerate cognitive dissonance (Festinger, 1957). Some consumers may avoid cognitive dissonance arousal altogether by using selective perception, filtering out inconsistencies (Bryant, 1989). Others may accept contradictions without discomfort, as the theory of cognitive polyphasia suggests individuals can live with competing ideas and employ different rationales to understand the same phenomenon (Upham & Johansen, 2020). In such cases, consumers' existing mental frameworks enable them to make sense of tensions in sustainability without experiencing psychological discomfort.

In cases where consumers cannot sufficiently reconcile competing cognitions, they may rely on defense mechanisms to manage their cognitive dissonance. These are habitual and unconscious strategies, like neutralization, rationalization, and compensatory behavior, that help consumers pre-empt or reduce their cognitive dissonance without engaging with the underlying inconsistencies (Homburg & Fürst, 2007). One such mechanism is moral licensing, where individuals use past or concurrent behaviors to justify less ethical subsequent behavior (Merritt et al., 2010), that would otherwise arouse cognitive dissonance. For example, a Nespresso customer might justify their continued use of single-use pods by pointing to their participation in the company's recycling program, balancing out their unsustainable consumption. Consumers may also rationalize their behavior using justifications like "It is only a small indulgence" or "I have worked so hard – I earned it." These defense mechanisms often work in tandem, forming a psychological buffer that

helps consumers avoid deeper engagement with contradictory cognitions.

While these examples focus on internal responses to cognitive dissonance, similar strategies can help consumers make sense of tensions in firms' sustainability communications. For instance, Nespresso's messages about its carbon-neutral status may neutralize cognitive dissonance by reassuring consumers that their consumption is environmentally responsible. However, when firms' sustainability communications clash with consumers' perceptions of the firm, these messages may be interpreted as greenwashing (Keilmann & Koch, 2024), making consumers' cognitive dissonance intolerable. If consumers can no longer rely on their internal coping strategies like moral licensing, they may experience a breakdown in their existing mental frameworks. This disruption can trigger the sensemaking process, prompting consumers to seek out new information to help them make sense of tensions in sustainability (Miron-Spektor et al., 2018; Pizzutti et al., 2022; Qu et al., 2022).

Sensemaking process

Sensemaking is a "reasoned discourse between people" (Weick, 1995a, p. 137) consisting of three steps: sense-breaking, sense-giving, and sensemaking (Giuliani, 2016). Sharma & Jaiswal (2018) found that organizational and project leaders' cognitive frames vary over time, and sensemaking helps individuals converge on shared meanings, changing how they make sense of tensions in sustainability. For greening firms, sensemaking can help align meanings and expectations between firms and consumers (Rosa et al., 1999).

Sense-breaking

A consumer's inability to reconcile conflicting cognitions indicates that their "frame[s] of reference" (Lewis, 2000, p. 767) have been violated, disrupting their existing sensemaking processes. Thus, sense-breaking is the "destruction or breaking down of meaning" (Pratt, 2000, p. 464) that leads individuals to question and reframe their existing mental frameworks (Giuliani, 2016). Communications between firms and consumers highlighting the inherent conflicts between their sustainability goals may provoke or increase the consumer's cognitive dissonance, breaking their sensemaking processes.

Nespresso, for example, faced skepticism after achieving B Corp status in 2022 due to previous issues with child labor in Nespresso's supply chain and waste from single-use pods (Ludmir, 2023; Tatum, 2023). These criticisms indicate that consumers could not reconcile their knowledge of Nespresso's practices with B Corp certifications, breaking their

sensemaking processes. The resulting cognitive dissonance also undermined trust in B Corp certifications, with many questioning its validity as the ‘gold standard’ for ethical companies, a status that is increasingly debated (Bennett, 2024). Such disruptions may prompt consumers to avoid or exit firms, or to re-evaluate their assumptions and seek new information or mental frameworks to help them make sense of tensions in sustainability (Pizzutti et al., 2022; Qu et al., 2022).

Sense-giving

In sense-giving, firms provide narratives that help consumers make sense of tensions in sustainability. By offering rationales, firms explain and legitimize their decisions and actions (Giuliani, 2016), connecting practices to reason (Green, 2004). Communicating these narratives to consumers requires consensus-building between the firm and the consumer through rounds of “negotiated social construction” (Gioia & Chittipeddi, 1991, p. 434), which occurs slowly, over time. Effective sense-giving requires greening firms to craft narratives that fall within consumers’ latitude of acceptance, aligning with the consumer’s existing knowledge, values, and beliefs (Weick et al., 2005).

Greening firms often dedicate substantial portions of their websites to explaining their sustainability initiatives. For instance, Nespresso’s AAA Sustainable Quality Program integrates quality, productivity, and sustainability into an overarching program, linking its greening initiatives with business-as-usual practices. Quality is explicitly linked to coffee production and increased revenues, while productivity is connected to economic management and farmer livelihoods, and sustainability is integrated as a separate pillar, further emphasizing social and environmental well-being (Nespresso, 2024). These sense-giving narratives help consumers make sense of tensions in sustainability by acknowledging and integrating tensions into a coherent and compelling message that helps consumers reinterpret tensions in sustainability as complementary.

Sensemaking

Consumers can either assimilate or reject the firm’s narratives in the sensemaking stage. Assimilation occurs when consumers fuse the firm’s narratives with their ‘broken’ mental frameworks to create a new understanding of tensions in sustainability. For Nespresso, consumers may assimilate the firm’s messages around the complexity of balancing investments in developing technologies like biodegradable capsules (Ludmir, 2023) while maintaining their business-as-usual operations.

In this approach, tensions in sustainability are not suppressed or ignored but integrated into a consonant whole

(Child, 2020), making it important for greening firms to ensure their sustainability communications resonate with consumers while minimizing consumers’ cognitive dissonance. By engaging in the sensemaking process, greening firms can help consumers develop a more nuanced understanding of the trade-offs and complexities of greening while presenting transparent narratives that avoid unintentional greenwashing. Thus, for greening firms, the sensemaking process provides the foundation for developing consumers’ paradox mindsets.

Paradox mindset

An individual’s paradox mindset captures their propensity to embrace contradictions (Praszkier et al., 2022) and tolerate ambiguity (Miron-Spektor et al., 2018). Paradox mindsets help individuals recognize and accept tensions (Smith & Tushman, 2005) and “accommodate interrelated yet conflicting economic, environmental, and social concerns” (Hahn et al., 2018, p. 237). Paradox mindsets consist of paradoxical frames (Miron-Spektor et al., 2011), or mental templates, that individuals use to recognize and accept tensions (Smith & Tushman, 2005). Paradoxical frames allow individuals to view tensions as competing demands that are contradictory yet interdependent (Jarzabkowski et al., 2013; Miron-Spektor & Erez, 2017).

Consumers with paradoxical frames may adopt problem-solving strategies, such as seeking information or integrating sustainable practices into their daily routines, indicating that consumers accept the coexistence of contradictory forces (Moruzzi & Sirieix, 2015). An individual’s paradox mindset can be developed through engagement with paradoxical tensions (Boemelburg et al., 2023), paradoxical behavior (Rosing et al., 2011) or persuasive communications (Shao et al., 2019). For instance, managers can assign tasks that require employees to engage in paradoxical behavior, increasing their capacity to make sense of tensions in sustainability and reducing their cognitive dissonance (Schad et al., 2016).

Although firms cannot assign tasks to consumers, greening firms can use the sensemaking process to provide consumers with paradoxical frames that present tensions in sustainability as a “necessary and complementary” (Jarzabkowski & Lê, 2017, p. 436) part of the greening process. The transcendent approach to paradox management views paradoxes and tensions as socially constructed (Lewis, 2000; Sharma & Bansal, 2017), meaning that the existence of paradoxes is contingent upon how they are framed (Pang et al., 2022). For example, Nespresso’s initiative to repurpose used coffee grounds into fertilizer, compost, and biogas reframes coffee grounds from ‘waste’ to a valuable ‘input’ (Nespresso, 2018).

These sense-giving narratives enable greening firms to develop consumers' paradox mindsets (M. J. Chen, 2002, 2008), by framing away (Child, 2020) tensions in sustainability, reducing or negating consumers' cognitive dissonance. Thus, a paradox mindset requires consumers to embrace "the unity of opposites" (Boemelburg et al., 2023, p. 2), where tensions are accepted, integrated, and sense-given. In doing so, greening firms can leverage the sense-making process to provide consumers with a more nuanced and coherent understanding of tensions in sustainability, developing consumers' paradox mindsets.

Conceptual model

The conceptual model (Fig. 1) illustrates how greening firms can develop consumers' paradox mindsets through sensemaking. We theorize how this process unfolds by integrating sensemaking into Festinger's (1957) process of cognitive dissonance arousal. Our approach mirrors how managers develop their employees' paradox mindsets (Boemelburg et al., 2023; Knight & Paroutis, 2017), extending these insights to the firm-consumer relationship. The model focuses on consumers' responses to tensions in sustainability within a firm's sustainability communications and the role of firms in developing consumers' paradox mindsets.

The conceptual model is divided into the business model and consumer mindsets. Dashed lines indicate the presence of paradoxical logic and/or behavior, while the double-headed arrow in 'Tolerable' indicates consumers' ability to manage

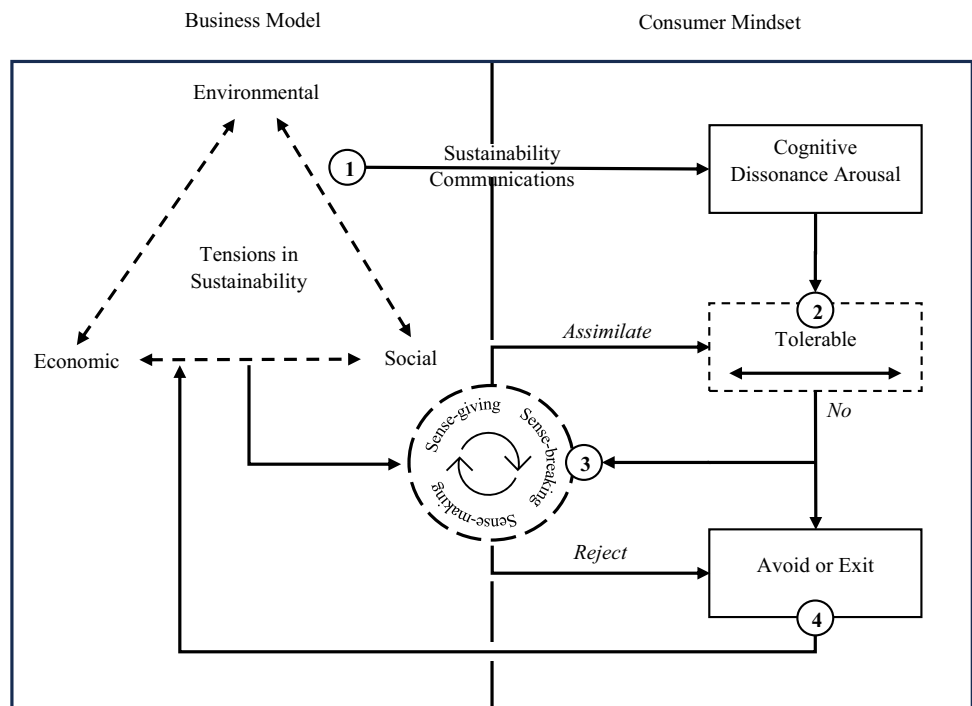
their tolerance for cognitive dissonance internally. Circular arrows indicate the iterative process of sensemaking at the firm-consumer interface. This process unfolds in four steps, explained in detail below using Nespresso as a case example.

Step 1: Tensions in sustainability and cognitive dissonance arousal

The consumer's journey into the paradoxical nature of greening begins when the paradoxical logic used to facilitate greening creates tensions in sustainability within firms' business models. Tensions in sustainability arise as the firm simultaneously pursues economic, environmental, and social objectives, pulling the firm's resources in different directions. Tensions in sustainability may become salient in the firm's sustainability communications. For example, Nespresso highlights its global sourcing of coffee beans from countries like Brazil, Ethiopia, and India alongside its carbon neutrality certification, drawing consumers' attention to contradictions within its operations.

Some consumers pre-empt cognitive dissonance by blocking out tensions in sustainability through selective perception. For instance, Nespresso customers who associate the firm with luxury may ignore tensions in sustainability communications. These consumers are immune to cognitive dissonance arousal and will not engage in sensemaking. To appeal to these consumers without trying to engage them in the sensemaking process, greening firms can use peripheral cues, such as certifications and eco-labels (Morris et al., 2005). In Nespresso's case, this might involve highlighting its B Corp status (Nespresso, 2022b), while downplaying

Fig. 1 The process of developing consumers' paradox mindsets



other details to reduce the saliency of tensions in sustainability in their communications.

For consumers more concerned with sustainability, tensions in sustainability may be difficult to ignore, leading to cognitive dissonance arousal. The intensity of the dissonance aroused depends on how well the firm's messaging aligns with the consumer's existing knowledge, attitudes, and beliefs. Messaging within a consumer's latitude of acceptance may evoke little to no cognitive dissonance. In contrast, communications in their latitude of noncommitment or rejection may provoke moderate to intolerable levels of cognitive dissonance.

For Nespresso, messages highlighting fair wages for coffee growers and sustainable farming practices may align with the values of sustainability-conscious consumers, evoking no cognitive dissonance. However, communications about Nespresso's recycling program might fall into a latitude of noncommitment for some consumers, who acknowledge the benefits of recycling but question the overall environmental impact of aluminum and single-use packaging. Conversely, claims of carbon neutrality juxtaposed with Nespresso's global supply chain may fall into skeptical consumers' latitude of rejection and may be interpreted as evidence of greenwashing, triggering strong cognitive dissonance.

Step 2: Consumer tolerance of cognitive dissonance

Consumers vary in their ability to tolerate cognitive dissonance (Festinger, 1957). In this step, consumers have three options: maintain a tolerable level of cognitive dissonance, engage in the sensemaking process with the firm, or avoid/exit the firm.

Some consumers manage their cognitive dissonance internally through defense mechanisms such as rationalization and neutralization. For example, by participating in the company's recycling program, Nespresso customers may neutralize the cognitive dissonance aroused by the firm's single-use capsules. If this proves insufficient, they may employ multiple dissonance reduction strategies, such as justifying their consumption as a deserved indulgence as the more ethical choice due to Nespresso's prominent sustainability communications. These strategies enable consumers to manage their cognitive dissonance internally while avoiding deeper engagement with the sensemaking process.

Similarly, consumers with a strong commitment to sustainability may tolerate some cognitive dissonance without fully engaging in the sensemaking process. These consumers may respond best to messages highlighting greening initiatives that address multiple goals, such as Nespresso's beekeeping program, which enhances coffee quality through pollination while providing an additional income stream for coffee growers, contributing to ecological health and economic resilience (Nespresso, 2022a). This win-win narrative

(Esty & Simmons, 2011; Esty & Winston, 2006) minimizes the saliency of tensions in sustainability by reframing various greening initiatives as mutually reinforcing rather than contradictory. These messages allow consumers to focus on the positive impacts of their consumption while pre-empting or minimizing cognitive dissonance arousal.

Consumers with an existing paradox mindset may be better equipped to tolerate cognitive dissonance, as they can already make sense of tensions in sustainability. For instance, they may understand how Nespresso's decision to invest 500 million CHF in sustainability initiatives (Nestlé Nespresso, 2024) contributes to better long-term customer experiences by providing access to a wider variety and better quality of coffee beans. Exposure to messages within these consumers' latitude of acceptance, which resonate with consumers' existing knowledge, values, and beliefs, can reinforce their paradox mindsets and support for the firm's greening initiatives without engaging them in the sensemaking process.

When consumers' cognitive dissonance becomes intolerable, responses diverge. Consumers are constrained by switching barriers, such as costs or contracts (Kiefer et al., 2019), may tolerate their cognitive dissonance temporarily but avoid or exit the firm over time. Consumers for whom the firm's messages fall within their latitude of rejection are more likely to disengage entirely, as the firm's rationales are unlikely to align with their viewpoint. These consumers may be highly skeptical of firms' greening initiatives, bypass the sensemaking process, or accuse the firm of greenwashing.

For example, Nespresso's recycling efforts are often criticized as greenwashing (Burrows, 2017). While 90% of customers have access to recycling points, only 32% of capsules are recycled (Nestlé Nespresso, 2021), leaving billions of capsules unrecycled annually (Ludmir, 2023). For consumers deeply committed to environmental sustainability, this discrepancy between Nespresso's messaging and outcomes may create intolerable cognitive dissonance, leading them to avoid or exit the firm or view its messages as greenwashing.

In contrast, consumers whose dissonance is intolerable but not deeply committed to a single dimension of sustainability may not outright reject the firm's messages. These consumers may still engage with messages that emphasize progress, such as Nespresso's home-compostable capsules, supply chain circularity, and machine refurbishment (Ludmir, 2023). In these cases, the consumer's cognitive dissonance signals that their existing mental frameworks are insufficient, prompting them to enter the sensemaking process as a form of dissonance reduction.

Step 3: The sensemaking process

In the iterative sensemaking process, firms and consumers try to create a shared understanding of tensions in sustainability. To be effective, the firm's narratives must align with

consumers' values and expectations, falling within their latitude of acceptance. Messaging outside this range may heighten skepticism or be perceived as greenwashing, exacerbating cognitive dissonance and prompting consumers to avoid or exit the firm. At the end of step 3, consumers either reject or assimilate the firm's narrative.

For instance, Nespresso frames its Reviving Origins program, which aims to reestablish coffee growing in regions impacted by conflict and environmental disasters in terms of social and economic sustainability (Nestlé Nespresso, 2024). While such investments might seem unrelated to consumers, Nespresso's sustainability communications emphasize how these investments provide access to different varieties of beans, improving the customer experience. By linking these social initiatives to tangible customer benefits, Nespresso illustrates the interdependence of social and economic sustainability, providing consumers with a sense-giving narrative that helps them make sense of tensions in sustainability.

Consumers may reject the firm's narratives when they perceive its messaging as inconsistent or misaligned with its purpose or when the messages are too far away from their existing knowledge, values, and beliefs. For example, consumers who are highly focused on economic sustainability may perceive a gap between the costs of the Reviving Origins program and the consumer benefits if they are uninterested in new flavors but sensitive to fluctuations in price. When the firm's narratives fall within these consumers' latitude of noncommitment or rejection, this may exacerbate the consumer's already intolerable cognitive dissonance. Consumers in this group may view the sensemaking process as a superficial or defensive response by the firm to legitimize their unsustainable practices or an indication of greenwashing, leading these consumers to avoid or exit the firm.

Conversely, when consumers accept the firm's narrative, they assimilate or integrate the paradoxical frameworks provided by the firm into their pre-existing frameworks, forging a new understanding of tensions in sustainability. In Nespresso's case, consumers may assimilate the firm's message, linking their social sustainability initiatives to consumer benefits, reinforcing perceptions of a premium experience, or as evidence of their commitment to sustainable consumption. When done well, firms can use sensemaking to develop consumers' paradox mindsets by cocreating shared understandings of tensions in sustainability, reducing consumers' cognitive dissonance to a tolerable level. Such sense-giving helps develop consumers' paradox mindsets by reframing greening as a multifaceted and ongoing journey rather than a binary choice to engage in sustainable business practices.

Step 4: Feedback loop

Consumer responses to the sensemaking process provide valuable feedback that greening firms can use to refine

their sustainability communications and sense-giving narratives. By tracking consumer responses through various mechanisms like consumer complaints, negative reviews, and consumption (or anti-consumption) patterns, greening firms can align their messaging more effectively with consumers' knowledge, values, and beliefs. For example, if Nespresso receives feedback expressing doubts about its recycling initiatives, it might increase the transparency in its messaging or invest in developing alternative solutions, like its biodegradable capsules. This feedback loop allows firms to refine their sustainability communications, reducing perceptions of greenwashing and reassuring consumers of their commitment to greening.

Increased transparency and responsiveness, particularly when consumers express doubts or disengage, offer an alternative to greenhushing and green blushing. While greening firms may be tempted to reduce or stop their sustainability communications to avoid scrutiny or accusations of greenwashing, such defensive responses may backfire. Reducing communications risks alienating the growing number of consumers interested in sustainability, potentially undermining the firm's credibility and diminishing support for the firm's greening initiatives.

Rather than retreating into silence, greening firms can leverage the feedback loop to address consumer concerns by adjusting how tensions in sustainability are communicated. If consumers find a particular tension, like the trade-off between affordability and environmental impact, poorly explained, firms can reframe their messages to convey how these goals are interdependent and complementary rather than conflicting. This approach may help mitigate perceptions of greenwashing while encouraging consumers to engage in sensemaking, supporting the development of consumers' paradox mindsets.

Theoretical and managerial implications

The conceptual model presented above offers several theoretical and managerial implications. First, it strengthens Pang et al.'s (2022) suggestion that consumers' paradox mindsets need further consideration in marketing, particularly for greening firms. Second, it underscores the importance of considering consumers' sensitivity to the saliency of tensions in sustainability when firms craft their sustainability communications. Third, it highlights how greening firms can leverage feedback loops to refine their sustainability communications and sense-giving narratives, developing consumers' paradox mindsets. This process can potentially be extended to other stakeholders, like investors, to increase support for greening initiatives in firms.

While we do not suggest that a consumer's paradox mindset is more important than traditional approaches like segmentation

or differentiation, we assert that consumer receptivity to paradoxical logic must be considered in a firm's sustainability communications. This insight challenges the conventional one-size-fits-all approach to sustainability communications. We suggest that firms can communicate their greening initiatives more effectively by tailoring their messaging to align with consumers' receptivity to paradoxical logic. Firms may also alter their communication style and messaging when using media channels that will reach differing types of consumers (with varying levels of receptivity to paradoxical logic).

To effectively segment consumers based on their receptivity to paradoxical logic, greening firms can focus on identifying psychographic traits that reflect openness to paradoxical logic and segment consumers into groups that are likely to be highly, moderately, and poorly receptive to paradoxical logic. Management research suggests that an individual's ability to process paradoxical logic is influenced by traits such as integrative complexity (Shao et al., 2019) and trait mindfulness (Qu et al., 2022), which could also apply to consumers.

For instance, consumers who invest in innovative products such as solar panels or electric vehicles, balancing high upfront costs with long-term benefits, demonstrate integrative complexity, making them more likely to be receptive to paradoxical logic. These consumers may respond well to messages that balance competing priorities, such as environmental benefits and long-term economic savings. Transparent narratives that acknowledge tensions and frame them as opportunities for innovation may reinforce these consumers' receptivity to paradoxical logic.

Consumers with moderate receptivity to paradoxical logic may exhibit trait mindfulness by engaging with sustainability practices that align closely with their values, such as recycling or buying local products while avoiding more ambiguous or challenging trade-offs. For instance, they might choose reusable shopping bags or energy-efficient appliances because these options provide clear, practical benefits that resonate with their values without requiring significant lifestyle changes. These consumers may struggle to fully embrace paradoxical logic but respond positively to simplified messages emphasizing incremental progress. Firms may be able to effectively engage these consumers when their sustainability communications are framed in accessible, relatable narratives.

Consumers with poor receptivity to paradoxical logic likely prioritize one value or dimension of sustainability, although their focus may differ. For example, consumers in this group may display conventional consumption patterns focused on price and convenience, while others may be dedicated to social sustainability. The latter group may prefer to purchase from firms with independent sustainability certifications, like Fair Trade, and boycott firms with vague messaging or whom they perceive as greenwashing. In contrast, cost- and convenience-driven consumers are more

likely to switch brands based on sales or promotions. While the reasoning behind the behavior varies, these consumers will likely share a preference for unambiguous messaging that allows them to avoid the sensemaking process, rejecting paradoxical frames. Understanding psychographic traits and their implications for consumer receptivity to paradoxical logic would enable greening firms to effectively tailor their sustainability communications to different consumer segments.

This leads to the second implication: greening firms need to align their sustainability communications with consumers' sensitivity to the saliency of tensions in sustainability. This theorizing is consistent with Moruzzi & Sirieix's (2015) findings, suggesting that consumers strongly committed to a single dimension of sustainability may lack the integrative complexity necessary to engage with paradoxical logic. These consumers may struggle with messages highlighting tensions in sustainability and respond differently to tensions in sustainability than less committed or indifferent consumers. Greening firms must craft their sustainability communications and sense-giving narratives carefully to ensure their messages resonate with consumers without arousing intolerable levels of cognitive dissonance.

For instance, consumers with high environmental involvement may be less skeptical of greening messages (Cheng et al., 2020) but more sensitive to tensions in sustainability. Their prioritization of environmental goals may result in narrow latitudes of noncommitment, making them more likely to perceive inconsistencies or ambiguities in the firm's messaging and sustainability communications are not closely aligned with their values. Such messages may arouse an intolerable level of cognitive dissonance, leading consumers to bypass the sensemaking process, avoid or exit the firm, or question the sincerity of the firm's commitment to greening.

In contrast, indifferent consumers who are not overly committed to a single dimension of sustainability may respond well to messaging that increases the saliency of tensions in sustainability. Greening firms can craft narratives that increase the saliency of tensions in sustainability in their communications, using interpretive contexts. Interpretive contexts are aspects such as environmental stimuli or framings that prime individuals to perceive behavior or goals as contradictory (Shao et al., 2019). Interpretive contexts offer consumers cues that indicate the presence of tensions (Knight & Paroutis, 2017).

For example, Nespresso can try to engage these consumers in the sensemaking process by combining messages about its progress and ongoing challenges in greening. By transparently acknowledging issues such as waste from single-use pods and the complexities of developing home-compostable capsules, Nespresso can spark consumers' curiosity and encourage them to engage in the sensemaking process. This transparency allows the firm to develop consumers' understanding of tensions in sustainability and, thus, their paradox mindset.

Greening firms, however, should employ messaging within consumers' latitude of rejection sparingly. Such messages risk exacerbating consumers' cognitive dissonance and appearing insincere, prompting consumers to disengage or reject the firm's narratives. However, firms may find that their underlying values change when greening, making specific consumer segments less relevant. For instance, ethical sourcing and fair wages may increase prices, alienating budget-conscious consumers but reinforcing the firm's appeal among socially conscious consumers.

Empirical research is needed to test how consumers respond to the saliency of tensions in sustainability within firms' messaging. This paper suggests that some consumers bypass the sensemaking process entirely by relying on internal defense mechanisms or avoiding or exiting the firm. Engaging these consumers in the sensemaking process is necessary for greening firms to develop consumers' paradox mindsets, fostering consumers' understanding of and support for greening initiatives.

Finally, the feedback loop enables greening firms to strategically refine their sustainability communications and sense-giving narratives based on consumer responses. For instance, if consumers express doubts about Nespresso's carbon-neutral status, they can increase transparency by providing detailed reports or having their claims verified by independent organizations. Responsiveness to consumer feedback can help greening firms craft more compelling narratives that align with consumer expectations, mitigating perceptions of greenwashing and reducing disengagement.

Thus, incorporating a feedback loop enables greening firms to avoid defensive communication practices, offering an alternative to greenhushing and green blushing. By carefully managing the saliency of tensions in their messaging, greening firms can help consumers make sense of tensions in sustainability while minimizing the risk of arousing intolerable levels of cognitive dissonance. Aligning their sustainability communications with consumers' latitudes of acceptance and noncommitment allows greening firms to encourage consumer engagement in the sensemaking process, developing consumers' paradox mindsets.

Greening firms may benefit from applying this approach to other stakeholders, such as investors. Developing investors' paradox mindsets may enhance their appreciation for the long-term strategic value of greening, even when short-term trade-offs exist. For example, Nespresso's communications about its Reviving Origins program highlight how social investments can improve customer experiences, driving stronger returns to shareholders in the future despite potentially reducing short-term dividends. This approach reinforces social and economic sustainability links while aligning investors' priorities with Nespresso's broader sustainability objectives. Future research could explore how

firms can develop investors' paradox mindsets and whether this influences their support for greening initiatives.

Conclusion

Our primary theoretical contribution is extending the development of paradox mindsets from managers and employees to firm-consumer communications. The conceptual model integrates cognitive dissonance and sensemaking to illustrate how firms can develop consumers' paradox mindsets.

Throughout this paper, we argue that the paradoxical logic used in greening complicates how firms communicate their sustainability initiatives. When tensions in sustainability are salient, or when communications fall outside consumers' latitude of acceptance, consumers may perceive greening firms as inconsistent or insincere, arousing cognitive dissonance. Intolerable levels of cognitive dissonance may cause consumers to avoid or exit relationships with the firm, resulting in accusations of greenwashing.

Greening firms can reduce these risks by carefully crafting their sustainability communications and sense-giving narratives to engage consumers in the sensemaking process. Through iterative cycles of sense-breaking, sense-giving, and sensemaking, firms can challenge consumers' existing mental frameworks and provide coherent narratives that reframe tensions as interdependent and complementary. By aligning their messages with consumers' latitudes of acceptance or noncommitment, firms can reduce cognitive dissonance arousal and foster the development of consumers' paradox mindsets. Furthermore, feedback loops, informed by consumer responses, allow firms to refine their messaging, avoid unintentional greenwashing, and offer a proactive alternative to greenhushing or green blushing.

Despite the potential of this model, there are several limitations. First, when sustainability messages fall within consumers' latitude of rejection and arouse intolerable cognitive dissonance, consumers may bypass the sensemaking process and avoid or exit the firm. Consumers' willingness to engage in sensemaking is likely influenced by their level of involvement, both with the product and sustainability. Consumers with higher involvement may be more motivated to make sense of tensions in sustainability, while lower involvement may increase the likelihood of disengagement. Future research should explore how involvement levels shape engagement and identify narrative framings or interpretive contexts that can encourage consumer participation in the sensemaking process. Understanding how to engage consumers in the sensemaking process effectively could provide valuable insights into crafting sustainability communications that promote the development of consumers' paradox mindsets.

Second, communication channels may influence how consumers respond to tensions in sustainability. For instance, firm websites may support more in-depth sense-giving than social media. Future research could investigate how different channels affect consumers' receptivity to paradoxical logic, sensitivity to tensions in sustainability, and engagement with the sensemaking process. Such research would significantly contribute to understanding how firms can craft effective sustainability communications while minimizing the risks, such as unintentional greenwashing.

Third, developing consumers' paradox mindsets may also have a potential 'dark side'. Increasing consumers' understanding of tensions in sustainability may reduce their cognitive dissonance and, thus, the pressure consumers exert on firms to pursue consistency in their greening initiatives. It may also promote defense mechanisms such as moral licensing among consumers, hindering further progress. For instance, consumers may justify opting out of Nespresso's recycling program by pointing to the firm's carbon-neutral status – if the impact is offset, why go through the hassle of cleaning and returning the pods? Such unintended consequences could slow greening efforts or legitimize continuing business-as-usual practices. Future research is needed to determine the validity of these concerns and how to mitigate them, ensuring that developing consumers' paradox mindsets leads to stronger support for greening in firms, not rebounds.

Finally, this article has focused on the paradoxical approach to managing tensions in sustainability. Firms that employ a hierarchical approach may risk arousing higher levels of cognitive dissonance among consumers or defaulting to defensive communication strategies, such as greenhushing or green blushing. Future research could explore how hierarchical and paradoxical approaches differ in their effects on consumers' cognitive dissonance and receptivity to sustainability communications, offering valuable insights into how managerial strategies influence the development of consumers' paradox mindsets.

This paper contributes to the literature on tensions in sustainability and paradox mindsets by theorizing how firms can actively develop consumers' capacity to tolerate ambiguity and embrace contradictions. Our model integrates cognitive dissonance and sensemaking to demonstrate how firms can develop consumers' understanding of the paradoxical logic underpinning sustainability communications. By tailoring messages to align with consumers' latitudes of acceptance and noncommitment, greening firms can reduce cognitive dissonance arousal, minimize perceptions of greenwashing, and engage consumers in an iterative sensemaking process. Feedback loops allow firms to refine these narratives over time, offering a proactive alternative to defense strategies like greenhushing or green blushing.

Understanding how firms can develop consumers' paradox mindsets becomes increasingly important as more firms engage in greening and consumers place greater emphasis on environmental and social responsibility. To successfully navigate tensions in sustainability, firms must do more than share information; they must help consumers make sense of the paradoxical nature of greening. Developing consumers' paradox mindsets can support this process by encouraging deeper engagement with firms' greening efforts, helping to sustain and accelerate the sustainable transitions necessary to address complex and interdependent sustainability challenges.

Acknowledgments Not applicable.

Funding Open Access funding enabled and organized by CAUL and its Member Institutions.

Data availability Not applicable – conceptual paper.

Declarations

Ethical approval Not applicable.

Competing interests Not applicable.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

References

- Bar Am, J., Doshi, V., Malik, A., Noble, S., & Frey, S. (2023). *Do consumers care about sustainability & ESG claims?* McKinsey & NielsonIQ. <https://www.mckinsey.com/industries/consumer-packaged-goods/our-insights/consumers-care-about-sustainability-and-back-it-up-with-their-wallets>
- Bennett, E. (2024). As greenwashing soars, some people are questioning B Corp certification. *BBC*. <https://www.bbc.com/worklife/article/20240202-has-b-corp-certification-turned-into-corporate-greenwashing>
- Beverland, M. B., Cankurtaran, P., Micheli, P., & Wilner, S. J. (2023). Co-creating educational consumer journeys: A sensemaking perspective. *Journal of the Academy of Marketing Science*, 52(2), 284–305. <https://doi.org/10.1007/s11747-023-00951-5>
- Boemelburg, R., Zimmermann, A., & Palmié, M. (2023). How paradoxical leaders guide their followers to embrace paradox: Cognitive and behavioral mechanisms of paradox mindset development.

- Long Range Planning*, 56(4), 1–13. <https://doi.org/10.1016/j.lrp.2023.102319>
- Bryant, F. B. (1989). A four-factor model of perceived control: Avoiding, coping, obtaining, and savoring. *Journal of Personality*, 57(4), 773–797. <https://doi.org/10.1111/j.1467-6494.1989.tb00494.x>
- Burrows, D. (2017). April. Have we solved the problem of coffee pods that harm the planet? *Caffeine*, 26, 48–51.
- Cekanavicius, L., Bazyté, R., & Dicmonaitė, A. (2014). Green business: Challenges and practices. *Ekonomika - Vilniaus Universitetas*, 93(1), 74–88. <https://doi.org/10.15388/Ekon.2014.0.3021>
- Chen, M. J. (2002). Transcending paradox: The Chinese “middle way” perspective. *Asia Pacific Journal of Management*, 19(2–3), 179–199. <https://doi.org/10.1023/a:1016235517735>
- Chen, M. J. (2008). Reconceptualizing the competition—cooperation relationship: A transparadox perspective. *Journal of Management Inquiry*, 17(4), 288–304. <https://doi.org/10.1177/1056492607312577>
- Chen, M. S., & Eweje, G. (2022). Managing tensions in sustainable development in Chinese and New Zealand business partnerships: Integrative approaches. *Business Strategy and the Environment*, 31(5), 5. <https://doi.org/10.1002/bse.3044>
- Chen, M. S., Eweje, G., & Kennedy, J. C. (2021). Managerial sense-making of tensions in sustainability: Empirical evidence from Chinese and New Zealand business partnerships. *Journal of Cleaner Production*, 319, 1–15. <https://doi.org/10.1016/j.jclepro.2021.128699>
- Cheng, Z.-H., Chang, C.-T., & Lee, Y.-K. (2020). Linking hedonic and utilitarian shopping values to consumer skepticism and green consumption: The roles of environmental involvement and locus of control. *Review of Managerial Science*, 14(1), 61–85. <https://doi.org/10.1007/s11846-018-0286-z>
- Child, C. (2020). Whence paradox? Framing away the potential challenges of doing well by doing good in social enterprise organizations. *Organization Studies*, 41(8), 1147–1167. <https://doi.org/10.1177/0170840619857467>
- Dröge, C., Halstead, D., & Mackoy, R. D. (1997). The role of competitive alternatives in the postchoice satisfaction formation process. *Journal of the Academy of Marketing Science*, 25(1), 18–30. <https://doi.org/10.1007/BF02894506>
- Epstein, M. J., Buhovac, A. R., & Yuthas, K. (2015). Managing social, environmental and financial performance simultaneously. *Long Range Planning*, 48(1), 1. <https://doi.org/10.1016/j.lrp.2012.11.001>
- Esty, D. C., & Simmons, P. J. (2011). *The green to gold business playbook: How to implement sustainability practices for bottom-line results in every business function*. Wiley.
- Esty, D. C., & Winston, A. S. (2006). *Green to gold: How smart companies use environmental strategy to innovate, create value, and build competitive advantage*. Yale University Press. <https://yalebooks.yale.edu/book/9780300119978/green-to-gold/>
- Falchi, A., Grolleau, G., & Mzoughi, N. (2021). Why companies might under-communicate their efforts for sustainable development and what can be done? *Business Strategy and the Environment*, 31(5), 1938–1946. <https://doi.org/10.1002/bse.2991>
- Festinger, L. (1957). *A theory of cognitive dissonance*. Row, Peterson.
- Font, X., Elgammal, I., & Lamond, I. (2017). Greenhushing: The deliberate undercommunicating of sustainability practices by tourism businesses. *Journal of Sustainable Tourism*, 25(7), 1007–1023. <https://doi.org/10.1080/09669582.2016.1158829>
- Gioia, D. A., & Chittipeddi, K. (1991). Sensemaking and sensegiving in strategic change initiation. *Strategic Management Journal*, 12(6), 433–448. <https://doi.org/10.1002/smj.4250120604>
- Giuliani, M. (2016). Sensemaking, sensegiving and sensebreaking: The case of intellectual capital measurements. *Journal of Intellectual Capital*, 17(2), 218–237. <https://doi.org/10.1108/JIC-04-2015-0039>
- Green, S. E. (2004). A rhetorical theory of diffusion. *The Academy of Management Review*, 29(4), 653–669. <https://doi.org/10.2307/20159076>
- Hahn, T., Pinkse, J., Preuss, L., & Figge, F. (2015). Tensions in corporate sustainability: Towards an integrative framework. *Journal of Business Ethics*, 127(2), 2. <https://doi.org/10.1007/s10551-014-2047-5>
- Hahn, T., Figge, F., Pinkse, J., & Preuss, L. (2018). A paradox perspective on corporate sustainability: Descriptive, instrumental, and normative aspects. *Journal of Business Ethics*, 148(2), 235–248. <https://doi.org/10.1007/s10551-017-3587-2>
- Homburg, C., & Fürst, A. (2007). See no evil, hear no evil, speak no evil: A study of defensive organizational behavior towards customer complaints. *Journal of the Academy of Marketing Science*, 35(4), 523–536. <https://doi.org/10.1007/s11747-006-0009-x>
- Jarzabkowski, P., & Lê, J. K. (2017). We have to do this and that? You must be joking: Constructing and responding to paradox through humor. *Organization Studies*, 38(3–4), 433–462. <https://doi.org/10.1177/0170840616640846>
- Jarzabkowski, P., Lê, J. K., & Van de Ven, A. H. (2013). Responding to competing strategic demands: How organizing, belonging, and performing paradoxes coevolve. *Strategic Organization*, 11(3), 245–280. <https://doi.org/10.1177/1476127013481016>
- Keilmann, J., & Koch, T. (2024). When environmental claims are empty promises: How greenwashing affects corporate reputation and credibility. *Environmental Communication*, 18(3), 266–284. <https://doi.org/10.1080/17524032.2023.2267782>
- Kiefer, C. P., Del Río González, P., & Carrillo-Hermosilla, J. (2019). Drivers and barriers of eco-innovation types for sustainable transitions: A quantitative perspective. *Business Strategy and the Environment*, 28(1), 155–172. <https://doi.org/10.1002/bse.2246>
- Knight, E., & Paroutis, S. (2017). Becoming salient: The TMT leader's role in shaping the interpretive context of paradoxical tensions. *Organization Studies*, 38(3–4), 403–432. <https://doi.org/10.1177/0170840616640844>
- Koc, E. (2019). Service failures and recovery in hospitality and tourism: A review of literature and recommendations for future research. *Journal of Hospitality Marketing & Management*, 28(5), 513–537. <https://doi.org/10.1080/19368623.2019.1537139>
- Lee, S. Y., & Chung, S. (2023). Publics' views of Corporate Social Advocacy initiatives: Exploring prior issue stance, attitude toward a company, and news credibility. *Management Communication Quarterly*, 37(2), 281–309. <https://doi.org/10.1177/08933189221105808>
- Lewis, M. W. (2000). Exploring paradox: Toward a more comprehensive guide. *Academy of Management Review*, 25(4), 760–776. <https://doi.org/10.5465/amr.2000.3707712>
- Livonen, K. (2018). Defensive responses to strategic sustainability paradoxes: Have your coke and drink it too! *Journal of Business Ethics*, 148(2), 309–327. <https://doi.org/10.1007/s10551-017-3580-9>
- Loo, P. T., Khoo-Lattimore, C., & Boo, H. C. (2021). How should I respond to a complaining customer? A model of cognitive-emotive-behavioral from the perspective of restaurant service employees. *International Journal of Hospitality Management*, 95, 1–10. <https://doi.org/10.1016/j.ijhm.2021.102882>
- Ludmir, C. (2023). Nespresso launches its first paper-based compostable capsules. *Forbes*. <https://www.forbes.com/sites/claraludmir/2023/09/13/nespresso-launches-its-pilot-of-home-compostable-capsules/>
- Lyon, T. P., & Montgomery, A. W. (2015). The means and end of greenwash. *Organization & Environment*, 28(2), 223–249. <https://doi.org/10.1177/1086026615575332>
- Merritt, A. C., Effron, D. A., & Monin, B. (2010). Moral self-licensing: When being good frees us to be bad. *Social and Personality Psychology Compass*, 4(5), 344–357. <https://doi.org/10.1111/j.1751-9004.2010.00263.x>

- Miron-Spektor, E., Gino, F., & Argote, L. (2011). Paradoxical frames and creative sparks: Enhancing individual creativity through conflict and integration. *Organizational Behavior and Human Decision Processes*, 116(2), 229–240. <https://doi.org/10.1016/j.obhdp.2011.03.006>
- Miron-Spektor, E., Ingram, A., Keller, J., Smith, W. K., & Lewis, M. W. (2018). Microfoundations of organizational paradox: The problem is how we think about the problem. *The Academy of Management Journal*, 61(1), 26–45. <https://doi.org/10.5465/amj.2016.0594>
- Miron-Spektor, E., & Erez, M. (2017). Looking at creativity through a paradox lens: Deeper understanding and new insights. In Lewis, M., Smith, W.K., Jarzabkowski, P., & Langley, A. (Eds.), *Handbook of Organizational Paradox: Approaches to Plurality, Tensions and Contradictions* (pp. 436–451). Oxford University Press. <https://doi.org/10.1093/oxfordhb/9780198754428.001.0001>
- Morris, J. D., Woo, C., & Singh, A. (2005). Elaboration likelihood model: A missing intrinsic emotional implication. *Journal of Targeting, Measuring, and Analysis for Marketing*, 14(1), 79–98.
- Moruzzi, R., & Sirieix, L. (2015). Paradoxes of sustainable food and consumer coping strategies: A comparative study in France and Italy. *International Journal of Consumer Studies*, 39(5), 525–534. <https://doi.org/10.1111/ijcs.12228>
- Nestlé Nespresso. (2021). *Nespresso demonstrates landmark sustainability progress with the publication of The Positive Cup*. Nestlé Nespresso. https://nestle-nespresso.com/Nespresso_demonstrates_landmark_sustainability_progress_with_the_publication_of_The_Positive_Cup
- Nestlé Nespresso. (2024). *A sustainable future: Our commitment*. Nestlé Nespresso. https://nestle-nespresso.com/about_us/our_commitment
- Nespresso. (2018). *Unearthing the value in used coffee grounds*. Nespresso. <https://www.sustainability.nespresso.com/circularity/value-in-used-coffee-grounds>
- Nespresso. (2022a). *The beans and the bees*. Nespresso. <https://www.sustainability.nespresso.com/regenerative-agriculture/beans-bees>
- Nespresso. (2022b). *Nespresso achieves B Corp™ certification*. Nestlé Nespresso. <https://nestle-nespresso.com/nespresso-achieves-bcorp-certification>
- Nespresso. (2024). *Discover the AAA Sustainable Quality™ Program*. Nespresso. <https://www.sustainability.nespresso.com/communities/aaa-sustainable-quality-program>
- Oliver, R. L. (1987). An investigation of the interrelationship between consumer (dis) satisfaction and complaint reports. *Advances in Consumer Research*, 14(1), 1.
- Ortiz-De-Mandujana, N., & Bansal, P. (2016). The long-term benefits of organizational resilience through sustainable business practices. *Strategic Management Journal*, 37(8), 1615–1631. <https://doi.org/10.1002/smj.2410>
- Pang, D., Liu, L. A., & Chen, M.-J. (2022). A transparadox process of decision making. *Management and Organization Review*, 18(3), 427–462. <https://doi.org/10.1017/mor.2021.38>
- Pizzutti, C., Gonçalves, R., & Ferreira, M. (2022). Information search behavior at the post-purchase stage of the customer journey. *Journal of the Academy of Marketing Science*, 50(5), 981–1010. <https://doi.org/10.1007/s11747-022-00864-9>
- Praszkier, R., Munnik, P., & Zablocka, A. (2022). Paradox mindset in management: Theory and measurement. *Journal of Positive Management*, 11(1), 3–12. <https://doi.org/10.12775/JPM.2020.001>
- Pratt, M. G. (2000). The good, the bad, and the ambivalent: Managing identification among Amway distributors. *Administrative Science Quarterly*, 45(3), 456–493. <https://doi.org/10.2307/2667106>
- Qu, Y. (Elly), Todorova, G., & Dasborough, M. T. (2022). Someone must be mindful: Trait mindfulness as a boundary condition for paradoxical leader behaviors. *Journal of Leadership & Organizational Studies*, 29(4), 486–499. <https://doi.org/10.1177/15480518221115487>
- Rafi, T. (2022). *Why sustainability is crucial for corporate strategy*. World Economic Forum. <https://www.weforum.org/agenda/2022/06/why-sustainability-is-crucial-for-corporate-strategy/>
- Rao, A., & Mattarelli, E. (2023). Reacting to the ambidexterity mandate: How experienced tensions and cognitive dissonance influence innovative behaviors in a global organization. *Strategic Organization*, 22(2), 297–329. <https://doi.org/10.1177/14761270231193386>
- Rosa, J. A., Porac, J. F., Runser-Spanjol, J., & Saxon, M. S. (1999). Sociocognitive dynamics in a product market. *Journal of Marketing*, 63(4_suppl1), 64–77. <https://doi.org/10.1177/00222429990634s108>
- Rosing, K., Frese, M., & Bausch, A. (2011). Explaining the heterogeneity of the leadership-innovation relationship: Ambidextrous leadership. *The Leadership Quarterly*, 22(5), 956–974. <https://doi.org/10.1016/j.leaqua.2011.07.014>
- Schad, J., Lewis, M. W., Raisch, S., & Smith, W. K. (2016). Paradox research in management science: Looking back to move forward. *Academy of Management Annals*, 10(1), 1. <https://doi.org/10.5465/19416520.2016.1162422>
- Shao, Y., Nijstad, B. A., & Täuber, S. (2019). Creativity under workload pressure and integrative complexity: The double-edged sword of paradoxical leadership. *Organizational Behavior and Human Decision Processes*, 155, 7–19. <https://doi.org/10.1016/j.obhdp.2019.01.008>
- Sharma, G., & Bansal, P. (2017). Partners for good: How business and NGOs engage the commercial–social paradox. *Organization Studies*, 38(3–4), 341–364. <https://doi.org/10.1177/0170840616683739>
- Sharma, G., & Jaiswal, A. K. (2018). Unsustainability of sustainability: Cognitive frames and tensions in bottom of the pyramid projects. *Journal of Business Ethics: JBE*, 148(2), 291–307. <https://doi.org/10.1007/s10551-017-3584-5>
- Sherif, M., & Hovland, C. I. (1961). *Social judgment: Assimilation and contrast effects in communication and attitude change* (pp. xii, 218). Yale Univer. Press.
- Slawinski, N., Smith, W. K., & Van der Byl, C. A. (2024). Leveraging the dominant pole: How champions of an industry-wide environmental alliance navigate cooperation paradoxes. *Journal of Management*. <https://doi.org/10.1177/01492063241252762>
- Smith, W. K., & Tushman, M. L. (2005). Managing strategic contradictions: A top management model for managing innovation streams. *Organization Science*, 16(5), 522–536. <https://doi.org/10.1287/orsc.1050.0134>
- STACS. (2024). *Top 6 ESG Trends in 2024 as mandatory ESG reporting becomes a global norm—STACS Network*. <https://stacs.io/top-6-esg-trends-in-2024-as-mandatory-esg-reporting-becomes-a-global-norm/>
- Tatum, M. (2023). *Nespresso responds to its critics*. The Grocer. <https://www.thegrocer.co.uk/analysis-and-features/nespresso-responds-to-its-critics/681200.article>
- Upham, P., & Johansen, K. (2020). A cognitive mess: Mixed feelings about wind farms on the Danish coast and the emotions of energy infrastructure opposition. *Energy Research & Social Science*, 66, 1–10. <https://doi.org/10.1016/j.erss.2020.101489>
- Voorhees, C. M., Brady, M. K., & Horowitz, D. M. (2006). A voice from the silent masses: An exploratory and comparative analysis of noncomplainers. *Journal of the Academy of Marketing Science*, 34(4), 514–527. <https://doi.org/10.1177/0092070306288762>
- Weick, K. E. (1995). *Sensemaking in organizations*. Sage Publications.
- Weick, K. E., Sutcliffe, K. M., & Obstfeld, D. (2005). Organizing and the process of sensemaking. *Organization Science*, 16(4), 409–421. <https://doi.org/10.1287/orsc.1050.0133>

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.