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Global Business Conference 2025 Proceedings
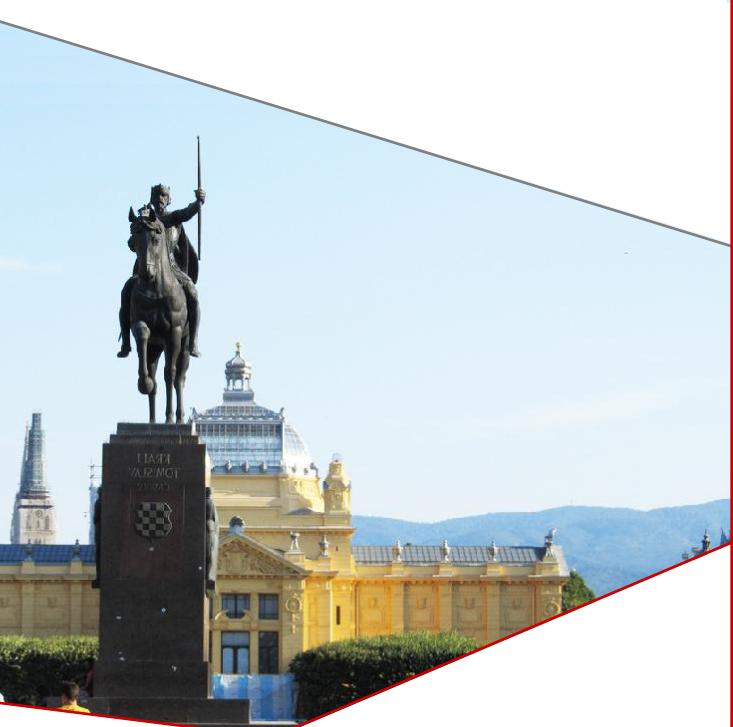
Editors:
Joe Hair, PhD
Zoran Krupka, PhD
Goran Vlašić, PhD

Sep 24th – 27th, 2025
Zagreb, Croatia

Institut za inovacije
Innovation Institute

16th ANNUAL GLOBAL BUSINESS CONFERENCE
Zagreb (Croatia), September 24th – 27th, 2025

Editors:
Joe Hair, PhD
Zoran Krupka, PhD
Goran Vlašić, PhD

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Content

USING NEURO-PHYSIOLOGICAL MEASURES TO ASSESS RADIO ADVERTING EFFECTIVENESS

Christo Boshoff
University of Stellenbosch
Stellenbosch, SOUTH AFRICA
e-mail: cboshoff@sun.ac.za

Izel Vorster
University of Stellenbosch
Stellenbosch, SOUTH AFRICA

Abstract

It is true that consumers are exposed to multiple advertising messages daily and that it is becoming increasingly difficult for advertisers to attract and retain their attention. As a result, advertisers have to act more strategically and consider how specific elements of an advertisement may impact the way consumers process an advertisement. Despite significant technological developments, radio continues to be a relevant advertising medium. There is, however, a general lack of creativity in radio advertising and many radio advertisements are perceived to be irritating or repetitive. One of the key elements of radio advertising that is not well understood is the voice-over.

The primary purpose of the study was to assess the influence that different voice-over types may have on the consumers' processing of a radio advertisement. Neurophysiological research methods were used to analyze how four different voice types (high-pitched female, low-pitched female, high-pitched male and low-pitched male) were processed. The study also considered the moderating effects of appeal type (emotional vs rational) and product category (feminine, masculine and gender-neutral products).

The results indicate that the voice-over type has a profound impact on how a specific radio advertisement is processed, and, as a result, the effectiveness of the advertisement. Different voice-overs are not processed in the same way and the experience of a specific radio advertisement can be altered by simply changing the type of voice used. In addition, a specific voice type may be a better fit for a certain advertisement, and the appropriateness of a voice may depend on the product category, advertising appeal, as well as the gender of the target audience.

The study makes a key methodological contribution by showing the value of analyzing different voice-over types in radio advertising with neurophysiological research methods.

Keywords
consumer behavior, radio advertisement

MAPPING THE INTELLECTUAL LANDSCAPE OF XENOCENTRISM, SELF, AND COUNTRY: A BIBLIOMETRIC REVIEW AND RESEARCH AGENDA

Joana Rosa Cardoso Carvalho
ESPM-PPGA
Rua Joaquim Tavora, 1240, 04015-013, Sao Paolo, SP, BRAZIL
e-mail: carvalho.joana@acad.espm.br

Larissa Luz Raposo
ESPM-PPGA
Rua Joaquim Tavora, 1240, 04015-013, Sao Paolo, SP, BRAZIL
e-mail: larissa.raposo@espm.br

Vivian Iara Strehlau
ESPM-PPGA
Rua Joaquim Tavora, 1240, 04015-013, Sao Paolo, SP, BRAZIL
e-mail: vstrehlau@espm.br

Miriam Tais Salomão
IPAM-Porto
Rua Manuel Pinto de Azevedo, 748. 4100-320 Porto, PORTUGAL
e-mail: miriam.salomao@universidadeeuropeia.pt

Abstract

This study maps the intellectual structure and thematic evolution of the literature addressing the relationship between self, xenocentrism, and country. Drawing on 506 documents published between 1984 and 2024 and analyzed through bibliometric techniques using Bibliometrix, the study reveals that while country image and country of origin are long-established constructs in international marketing, their integration with self-concept and xenocentrism remains underdeveloped. The co-occurrence network and thematic mapping highlight the peripheral position of xenocentrism in the field and the absence of strong conceptual links to identity-based theories. The emergence of themes such as cosmopolitanism, brand globalness, and consumer xenocentrism indicates an evolving interest in how global cultural flows shape consumer behavior. However, the acculturated self—a concept reflecting the negotiation of hybrid identities in global contexts—has yet to be systematically explored. By identifying these gaps and suggesting paths for theoretical integration, the study contributes to advancing a more nuanced, identity-centered understanding of global consumption.

Keywords
xenocentrism, self-concept, country image, country of origin, bibliometric analysis

ARTIFICIAL INTELLIGENCE IN MARKETING CONTENT PRODUCTION: ADOPTION, PRACTICES, AND FUTURE PERSPECTIVES

André Silva de Carvalho
ESPM
São Paulo, SP, BRAZIL

Suzane Strehlau
ESPM
São Paulo, SP, BRAZIL

Abstract

Artificial intelligence (AI) is increasingly embedded in marketing workflows, particularly in content production, where it supports efficiency, personalization, and consumer engagement. This study examines the extent and forms of AI adoption by marketing professionals in Brazil, focusing on how these technologies are integrated into daily practices. Using a descriptive and mixed-methods approach, data were collected through a structured questionnaire with both open- and closed-ended questions applied to 13 professionals across different generations and roles. The findings reveal an exceptionally high adoption rate (92.3%), with tools such as ChatGPT, Gemini, and Canva dominating usage. AI is mainly applied in text generation, prompt design, editing, SEO optimization, and visual content creation. Despite widespread adoption, respondents emphasized the complementary—rather than substitutive—role of AI, underlining the irreplaceable value of human expertise in ensuring authenticity and cultural contextualization. Ethical considerations, including data privacy, transparency, and responsible use, were consistently highlighted as challenges to be addressed. The study concludes that AI is shaping a hybrid model of content production in which human creativity coexists with algorithmic support. This shift requires new professional skills, particularly in prompt engineering and AI oversight, while also demanding that organizations establish clearer ethical guidelines. These findings contribute to academic discussions on AI in marketing and provide practical insights into the evolving dynamics of digital content production.

ENHANCING ENGLISH AS A FOREIGN LANGUAGE LEARNING FOR STUDENTS WITH LEARNING DIFFICULTIES USING ANIMAL-ASSISTED PRACTICES

Tania Goldreich
Faculty of Letters, Alexandru Ioan Cuza University of Iași
Iasi, Romania
e-mail: gold.tania@gmail.com

Abstract

Students with learning difficulties (LD) face challenges when learning English as a foreign language, particularly when it comes to reading and learning vocabulary. Traditional EFL instruction often emphasizes text-based activities that can be difficult for learners who struggle with decoding, comprehension, and retention, leading to fewer opportunities for meaningful language use. This paper explores the use of animal-assisted practices as an innovative way to support vocabulary development, within a conceptual approach that prioritizes oral language acquisition in a supportive, non-judgmental environment. By applying ideas from animal-assisted education and nature-based pedagogy, the presence of animals in the learning setting can lower anxiety, encourage verbal interaction, and foster self-efficacy. Students participate in interactive experiences that integrate observation, conversation, and hands-on interaction with animals. These activities connect new vocabulary to real objects, actions, and real-life situations, providing multi-sensory input that supports memory, encourages spontaneous speech, and promotes vocabulary acquisition. Students' challenges are addressed by an oral-focused, experience-based approach creating conditions in which learners with LD can acquire vocabulary more effectively and gain greater self-efficacy in using English. The model offers teachers a practical framework for developing EFL interventions that answer the specific needs of students with LD, contributing to more effective language teaching practices in diverse educational contexts and bringing forward the potential of integrating animal interaction as a tool for EFL development.

Keywords

1. TEACHING ENGLISH AS A FOREIGN LANGUAGE

Teaching English as a foreign language (EFL) is a challenging task for teachers, especially when catering to the requirements of students who face various learning difficulties (LD). These individuals may encounter obstacles in aspects like reading comprehension, memory retention, focus, and language processing, which can delay their ability to acquire vocabulary and develop communicative competence (Nijakowska, 2010).

In intellectual, political, and commercial contexts, English is widely acknowledged as a worldwide lingua franca. It has a well-established function in promoting global communication, higher education access, and workforce involvement (Crystal, 2003). Proficiency in English is often considered essential for full engagement in the international arena, both professionally and socially (Seidlhofer, 2013).

The typical channels to EFL competency may be more difficult for students with LD to follow. For these students, traditional teaching methods that mainly focus on text-based learning might cause more obstacles (Snowling & Hulme, 2012). Many of these students struggle to acquire vocabulary and grammar through reading and writing, which can result in lower levels of participation in the classroom and affect students' Self- Efficacy (Bandura, 1997). Teachers often observe that students with LD disengage from language learning activities when they are unable to decode or comprehend texts effectively.

This situation highlights the need for innovative and inclusive strategies that provide multiple channels for language acquisition, allowing students with LD to develop functional communicative skills and self-efficacy in their ability to use English in authentic contexts. By expanding instructional methods and integrating approaches that emphasize oral communication, experiential learning, and supportive environments, teachers can reduce barriers and create opportunities for meaningful participation. Such efforts not only promote language development but also enhance engagement and help students with LD see themselves as capable language learners, which is an important step toward long-term success. Recent analyses of teaching techniques for EFL students with LD highlight the necessity for flexible, activity-centered strategies that prioritize participation and spoken communication (Goldreich, 2023).

2. CHALLENGES IN TEACHING VOCABULARY TO STUDENTS WITH LEARNING DIFFICULTIES

As a high school EFL teacher working with students with LD, I have encountered many challenges in the classroom. These difficulties stem from the varied channels in which students process information, shaped by each learner's individual profile. Ganschow and Sparks (2001) discuss how students with learning difficulties often show deficits in phonological processing, working memory, attention, and the ability to retain and process new material. They also emphasize that these difficulties can overlap, which means that students may experience a combination of challenges rather than a single challenge. One of the major challenges for EFL teachers is teaching students who are emergent readers. In some cases, these students are still developing basic reading skills in their first language, which makes acquiring vocabulary in a foreign language even more demanding (Geva & Wiener,

2014). For such students, traditional reading-based EFL methods often present too many simultaneous demands, including decoding unfamiliar words, processing meaning, and retaining new information (Swanson, Harris, & Graham, 2013). Consequently, reading may no longer be a helpful way of learning but rather a barrier that causes dissatisfaction and lowers the willingness to learn English.

The foundation of learning a new language is acknowledged to be vocabulary knowledge. It is hard to comprehend or communicate effectively without a working vocabulary (Nation, 2018). Even when grammar is imperfect, a learner can still communicate ideas if they have access to a core set of basic words.

Students who have a small but useful vocabulary may be able to communicate in ordinary situations, express themselves simply, and develop the self-efficacy necessary for more difficult language activities (Schmitt, 2010). In classrooms with students with LD, this makes vocabulary instruction especially crucial. Teachers must find ways to present new words in ways that do not rely heavily on text, instead using oral practice, repetition, and concrete experiences. When students begin to successfully use vocabulary in communication, they experience a sense of achievement that encourages further participation and reduces anxiety (Snowling & Hulme, 2012). Over time, this focus on vocabulary becomes a language goal and a tool for building self-efficacy and creating a more inclusive learning environment.

3. CHALLENGES WITH READING-BASED APPROACHES FOR STUDENTS WITH LEARNING DIFFICULTIES

Reading has been highlighted as a key source for vocabulary acquisition and proper language use in a large portion of the literature on language learning over the past few decades. Extensive reading or being read to in a learner's first language (L1) as well as in a second or foreign language has been shown in numerous studies to enhance vocabulary, foster grammatical awareness, and boost overall ability (Bamford & Day, 1998).

However, for many students with LD, reading presents a significant barrier. In LD classrooms, it is possible to encounter students in middle or high school who have not yet acquired the ability to read independently, or whose reading fluency remains significantly below grade level. Some can decode individual words but struggle to derive meaning from connected text, while others experience slow and effortful reading that limits comprehension and retention (Snowling & Hulme, 2012).

Research on EFL instruction for learners with LD has shown that heavy reliance on text-based input can intensify these challenges. Self-reading is a big challenge in LD classrooms, especially for adolescents who reach middle or high school without the ability to read fluently or comprehend text independently (Shaywitz, 2003). These students run the risk of slipping farther behind their peers in the absence of focused assistance or alternate routes to language exposure, which will lower their motivation and desire to learn the language. For non-readers, mainstream EFL textbooks and standardized tests often act as significant barriers. Since much of the curriculum depends on printed materials, these learners are unable to participate fully alongside their peers. This exclusion can prevent them from developing independent learning

skills and may contribute to frustration, low self-esteem, and a reluctance to engage with English learning (Westwood, 2018).

In such contexts, EFL teachers should design programs that do not depend solely on self-reading. Instead, alternative modes of input, such as structured oral interaction, multimedia resources, and experiential learning activities, can serve as substitute stimuli for reading, providing vocabulary exposure in ways that are accessible and engaging (García & Kleifgen, 2018; Nation, 2018). For emergent readers, these approaches not only bypass decoding barriers but also connect new language to meaningful, real-world contexts, supporting both comprehension and long-term retention.

4. THE ORAL CHANNEL AS A PATHWAY FOR VOCABULARY LEARNING

Taking into consideration the challenges of reading-based approaches for students with LD, one of the most effective strategies is to prioritize oral language as a main channel for language acquisition. In this approach, vocabulary learning is embedded in interactive, spoken communication rather than being primarily dependent on written texts. Ellis (2015) emphasizes that opportunities for oral input and meaningful interaction are central to second language acquisition, as they promote both vocabulary retention and communicative competence. Nation (2018) adds that such interaction is especially valuable for learners with limited literacy skills, since it provides accessible and engaging pathways to vocabulary growth.

For many students with LD, oral-focused practices allow language to be experienced as a living tool rather than an abstract academic subject. Instead of struggling through a page of text, they can access meaning directly through listening, speaking, and responding in real time. Oral activities can involve guided conversations, role-plays, problem-solving tasks, or storytelling, all of which naturally recycle vocabulary in meaningful contexts (Lightbown & Spada, 2021). This repetition in varied situations reinforces retention without the monotony or frustration that can accompany mechanical reading drills.

The classroom climate plays an equally critical role. A supportive, non-judgmental environment helps learners overcome the fear of making mistakes, which is often heightened in those who have experienced repeated academic setbacks. When the emphasis is on communication rather than accuracy, students are more likely to take risks, experiment with new words, and participate actively in tasks (Krashen, 1982).

Another advantage of oral-focused practices is that they can be easily adapted to different proficiency levels within the same group. While more advanced students can be challenged with complex structures, beginners can still participate meaningfully using simpler vocabulary and sentence frames. This flexibility supports inclusion, ensuring that no student is excluded from interaction because of their reading level.

One of the main objectives of creating EFL activities for students with LD is to increase their sense of self-efficacy. Students are more willing to try out new words and expressions when

they have confidence in their abilities to achieve and can communicate without worrying about criticism or failure (Dörnyei, 2001).

WTC - Willingness to Communicate (MacIntyre, 2007) is a closely similar notion. According to MacIntyre (2007), students who feel encouraged and secure are more likely to strike up a conversation, which is a necessary step in becoming proficient communicators in a foreign language.

Teachers create opportunities for success in oral communication that help students experience English as achievable and relevant, even when they lack strong reading skills. This positive attitude lays the groundwork for deeper language learning and future literacy development. Practically, innovative practices for language learning, based on oral proficiency were developed. One of these practices focus on animal-assisted integration into the learning process.

5. ANIMAL-ASSISTED EDUCATION

The creative field of animal-assisted education (AAE), which incorporates human-animal interaction into controlled learning settings, has gained popularity in recent decades. Animal-assisted activities (AAA) are more casual and enjoyable, while animal-assisted therapy (AAT) is mostly clinical in character and intended to address physical or psychological disorders. Animals are purposefully employed to enhance learning processes, inspire students, and foster a more stimulating and encouraging learning environment in the classroom. The main goal of AAE is education (Friesen, 2010).

The use of animals in educational and therapeutic contexts is not entirely new. Historical accounts suggest that animals were incorporated into human care and teaching settings as early as the 18th and 19th centuries, particularly in Europe and North America, where pets were sometimes brought into hospitals or schools to promote children's well-being (Jalongo, 2015). However, it was not until the late 20th century that systematic research began to explore the educational potential of structured animal-assisted interventions. This development coincided with the broader growth of human-animal interaction (HAI) research, which sought to understand the physical, psychological, and social benefits of relationships between humans and animals (Fine, 2019). Within this context, AAE established itself as a specialized area, drawing both from pedagogical theories and from the documented emotional and motivational effects of animals on learners.

The philosophy of AAE rests on principles that closely reflect contemporary views of learning. Animals provide a multisensory context in which students can see, touch, hear, and sometimes even smell and care for another living being. Friesen (2010) argues that animals in educational settings provide authentic, multisensory experiences that make learning more concrete and memorable. For students who struggle with abstract or text-based instruction, these experiences offer an alternative pathway to engagement and understanding. The nonjudgmental nature of animals also helps to reduce classroom anxiety and foster a sense of safety, particularly for children who may have experienced repeated academic failure or negative social comparisons. Animal-assisted practices have been shown to support human

well-being and reduce stress, creating conditions that may also benefit learning (Gee, Rodriguez, Fine, & Trammell, 2021).In addition, AAE fits well with approaches to education that focus on learning by doing and through direct experience, reflecting, and engaging with real-life contexts. The presence of an animal creates authentic opportunities for dialogue, observation, and shared experiences that can be naturally integrated into lessons across subject areas. For example, a teacher might structure a vocabulary activity around describing an animal's actions, or a science lesson around observing an animal's behavior. These approaches not only enhance academic skills but also support social development, as students often collaborate in caring for the animal or discussing their shared experiences (Kruger & Serpell, 2010).

According to Anderson and Olson (2006) children in classrooms with therapy dogs showed higher levels of motivation and participation. Preschool and early elementary students working with dogs were more attentive, followed instructions more effectively, and performed better on tasks than those in control groups. Their findings highlight how the presence of animals can serve as a catalyst for engagement, supporting sustained attention and emotional regulation in ways that enhance learning.

6. ANIMAL-ASSISTED PRACTICES IN EFL LEARNING FOR STUDENTS WITH LD

For students with LD, animal-assisted education (AAE) can provide unique benefits. Learners with conditions such as ADHD or dyslexia often experience frustration, repeated setbacks, and reduced self-efficacy in traditional classrooms (Snowling & Hulme, 2012). The supportive and nonjudgmental presence of an animal can create a sense of acceptance, while the interactive and sensory-rich nature of animal-related activities makes academic content more accessible. Beetz, Uvnäs-Moberg, Julius, and Kotrschal (2012) showed that such interactions can reduce stress, increase social interaction, and foster positive attitudes toward schoolwork. These conditions encourage students with learning difficulties to take risks, persevere, and attempt new tasks despite their challenges. In the specific context of foreign language learning, AAE holds significant potential. Learning a new language often provokes anxiety, especially in oral communication, where students fear making mistakes. Krashen's (1982) affective filter hypothesis highlights how high anxiety can block language acquisition, while relaxed and supportive environments facilitate it. Animals help lower this filter by shifting classroom dynamics away from judgment and toward interaction. Talking about or with an animal provides authentic, low-pressure communicative opportunities that engage students meaningfully.

AAE aligns with constructivist and experiential theories of education, emphasizing learning through doing and multisensory engagement. Activities such as observing, feeding, or describing animals provide students with visual, auditory, and kinesthetic input simultaneously, strengthening memory and recall (Brelsford, Meints, Gee, & Pfeffer, 2017). This multisensory approach is especially helpful for students who struggle with abstract or text-based learning. Equally important is the inclusive environment that animal-assisted practices foster. Traditional EFL classrooms often emphasize reading and writing, areas in which students with LD face repeated difficulties. By shifting toward oral practices and interactive tasks, teachers create learning conditions where success is more attainable. This

not only supports vocabulary acquisition but also encourages participation and willingness to use English in authentic contexts. (Brelsford et al., 2017). AAE also encourages social integration. Working together in activities involving animals, such as giving instructions, describing behavior, or presenting observations, provides cooperative learning opportunities that strengthen both social and linguistic skills. Research indicates that animal presence can act as a "social catalyst," helping children feel more comfortable engaging with peers and adults. Tissen, Hergovich, and Spiel (2007) for example, found that classrooms with animal-assisted activities reported greater social structure and improved peer relationships.

Practical applications in EFL settings can be varied. In pairs, students can describe an animal's behavior, provide brief oral updates, or work together on assignments related to animal observation. These exercises ease the stress of formal evaluation while promoting natural language use. Crucially, they are adaptable to various skill levels. More proficient students can create complete phrases or dialogues, while beginning readers can interact through oral vocabulary. All students, regardless of literacy level, can participate meaningfully thanks to this flexibility (Westwood, 2008).

When combined, animal-assisted practices combine student-centered pedagogy with the proven advantages of human-animal contact. They offer a technique to lessen anxiety, improve oral communication, and establish real-world settings for vocabulary development for EFL students with LD, which makes language learning more inclusive, interesting, and engaging.

7. THE LINK BETWEEN ANIMAL-ASSISTED LEARNING AND EFL VOCABULARY LEARNING

One of the main obstacles for students with LD studying EFL is vocabulary retention. Many students find it difficult to retain new words long enough to develop a useful vocabulary for communication, even when they are introduced in class. According to research, vocabulary recall is enhanced when it is connected to multisensory experiences and meaningful settings as opposed to rote memorization (Nation, 2018). For emergent readers, who might not have the decoding abilities to reinforce language through text alone, this is especially crucial.

Through the establishment of concrete links between words and events, animal-assisted learning provides a natural means to enhance recall. Students' language becomes concrete when they see it used to a living thing; it is now immediately connected to an observable activity, physical characteristic, or interaction.

For example, learning the word *feed* while giving food to an animal or the word *tail* while describing what they see in front of them embeds vocabulary in a concrete, memorable moment. This aligns with Paivio's dual coding theory, which holds that linking verbal information to visual and experiential input improves long-term recall (Paivio, 2007).

The presence of animals also encourages repetition through interaction. Students often ask questions, describe behaviors, and share observations multiple times during an animal-assisted activity. Such spontaneous oral use of language increases opportunities for recycling vocabulary in natural communication, which is known to strengthen retention (Webb, 2007).

Instead of rehearsing vocabulary in isolation, learners integrate it into authentic exchanges, reinforcing meaning and usage in real time.

The emotional value of interactions with animals is an additional advantage. It has been demonstrated that positive emotions like joy, excitement, and curiosity improve memory consolidation and recall (Immordino-Yang & Damasio, 2007).

Students with LD often carry negative associations with formal academic settings, particularly in areas like reading, where they may have experienced repeated failure. In contrast, interacting with animals often creates an emotionally safe and engaging atmosphere, which not only lowers anxiety but also helps anchor vocabulary to meaningful experiences (Beetz et al., 2012).

Self-efficacy's function in maintaining vocabulary acquisition is a related topic. Students' confidence in their abilities to utilize English increases when they experience success memorizing and using new words via animal-assisted exercises. This feeling of accomplishment encourages students to keep practicing, starting a learning cycle in which self-assurance boosts memory and vice versa. (Griva, Semoglou & Geladari, 2010). For learners who have struggled with traditional text-based vocabulary instruction, this shift is particularly powerful because it replaces failure with positive reinforcement.

The link between animal-assisted learning and vocabulary retention is also supported by evidence from multisensory learning approaches. Research on dyslexia emphasizes that engaging multiple senses, sight, touch, hearing, and movement strengthens the encoding and retention of new information (Shaywitz, 2003). In animal-assisted EFL contexts, this may include hearing the sound an animal makes, touching its fur, or observing its movements, alongside hearing and repeating the associated English words. These combined sensory inputs provide multiple retrieval cues, making it easier for students to recall the vocabulary later.

Real-world classroom modifications involving animals demonstrate the power of structured, animal-related assignments to enhance learning. For instance, students might learn a set of target action verbs, like *eat*, *drink*, *run*, or *sleep* by observing animals performing those actions, labeling what they see, and then discussing or describing them in English. This multimodal, context-rich repetition supports vocabulary retention more effectively than abstract practice. Research on Animal-Assisted Education shows that such activities significantly improve students' attention, motivation, and self-confidence in group settings, laying the groundwork for deeper language learning (Verhoeven, Verte, & van der Smagt, 2023).

By fostering multiple senses, evoking good emotions, promoting recurrent oral usage, and providing real-world associations, the use of animals in EFL training creates an environment that is conducive to vocabulary retention.

For students with learning difficulties, these elements compensate for the barriers posed by text-based learning and open new possibilities for acquiring and holding onto essential English vocabulary. When combined, these components show how using animals to help students with LD connect to English can help them overcome the limitations of traditional, text-heavy

training. Such activities provide a thorough framework for inclusive language instruction by using oral techniques, multimodal input, peer participation, and a nurturing environment.

8. LIMITATIONS

Although the model described here shows how animal-assisted activities help students with LD learn EFL vocabulary, it should be noted that there are a number of drawbacks. First, because the study focuses on high school students with LD, the methodology is context-specific, and the results might not be readily generalizable to other student populations. Second, access to animals, suitable facilities, and qualified staff are necessary for practical implementation, and these may not be available in all educational settings. Third, the framework is conceptual in nature and needs more empirical study to assess long-term results, gauge efficacy, and improve integration strategies into traditional curriculum.
Finally, the emphasis on oral vocabulary development does not fully address broader aspects of language learning, such as grammar or reading fluency, which remain important for comprehensive language proficiency. Recognizing these limitations underscores the need for continued research and adaptation to ensure inclusive and effective EFL practices.

Literature reviews also reveal that empirical evidence on the effectiveness of animal-assisted education (AAE) in EFL is scarce. Further research is needed to identify the conditions that enhance the impact of AAE on language proficiency and to highlight the joyful, engaging aspects of the learning process for students with LD as well as for all learners.

9. CONCLUSION

Students with LD need to be taught EFL using adaptable and innovative methods that go beyond text-based training. Communication skills require use of vocabulary but reading-based teaching approaches frequently leave out students who have trouble with decoding, understanding, and using texts on their own. Instead of helping these students develop their skills, reading-centered activities can exacerbate their dissatisfaction and diminish their sense of self-efficacy.

This paper explored an alternative approach that prioritizes oral communication within a supportive, non-judgmental environment and integrates animal-assisted practices to make vocabulary acquisition more meaningful. A review of animal-assisted education showed that animals have been successfully used in learning settings to encourage participation and social interaction. These advantages can be applied to EFL to establish learning environments where students with LD feel comfortable practicing speaking and interacting with new vocabulary.

An authentic and holistic learning environment is offered by the presence of animals. Through activities like naming, characterizing, and observing animals, students can make the connection between words and tangible objects and movements.

This strengthens memory, encourages spontaneous speech, and increases the likelihood that vocabulary will be retained and used in communication. For emergent readers, who cannot

rely on text as their primary channel, these practices offer accessible pathways into English that emphasize experience and interaction over print-based learning.

Integrating animal-assisted practices into EFL instruction offers a practical framework for inclusive language teaching. It responds to the needs of students with LD by reducing barriers, fostering self-efficacy, and linking language learning to real-life contexts. While more research is required to examine long-term impacts and improve implementation, this model demonstrates how animal interaction can enrich vocabulary learning and create opportunities for students to succeed in EFL learning.

References

1. Anderson, K. L., & Olson, M. R. (2006). The value of a dog in a classroom of children with severe emotional disorders. *Anthrozoös, 19*(1), 35-49.
2. Bamford, J., & Day, R. R. (1998). Issues in teaching second language reading. *Reading in a Foreign Language, 12*(2). University of Hawai'i, National Foreign Language Resource Center.
3. Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*(2), 191-215.
4. Beetz, A., Uvnäs-Moberg, K., Julius, H., & Kotrschal, K. (2012). Psychosocial and psychophysiological effects of human-animal interactions: The possible role of oxytocin. *Psychoneuroendocrinology, 37*(3), 426-435.
5. Brelsford, V. L., Meints, K., Gee, N. R., & Pfeffer, K. (2017). Animal-assisted interventions in the classroom: A systematic review. *International Journal of Environmental Research and Public Health, 14*(7), 669.
6. Crystal, D. (2003). *English as a global language*. Cambridge: Cambridge University Press.
7. Dörnyei, Z. (2001). *Motivational strategies in the language classroom*. Cambridge: Cambridge University Press.
8. Ellis, R. (2015). *Understanding second language acquisition* (2nd ed.). Oxford: Oxford University Press.
9. Fine, A. H. (Ed.). (2019). *Handbook on animal-assisted therapy: Foundations and guidelines for animal-assisted interventions*. Academic Press.
10. Friesen, L. (2010). Exploring animal-assisted programs with children in school and therapeutic contexts. *Early Childhood Education Journal, 37*(4), 261-267.
11. Ganschow, L., & Sparks, R. (2001). Learning difficulties and foreign language learning: A review of research and instruction. *Language Teaching, 34*(2), 79-98.
12. García, O., & Kleifgen, J. A. (2018). *Educating emergent bilinguals: Policies, programs, and practices for English learners*. Teachers College Press.
13. Gee, N. R., Rodriguez, K. E., Fine, A. H., & Trammell, J. P. (2021). Dogs supporting human health and well-being: A biopsychosocial approach. *Frontiers in Veterinary Science, 8*, 630465.
14. Geva, E., Wiener, J., & Wiener, J. R. (2014). *Psychological assessment of culturally and linguistically diverse children and adolescents: A practitioner's guide*. London: Springer Publishing Company.

15. Goldreich, T. (2023). English vocabulary acquisition for EFL students with learning disabilities in Israel - A review of instructional strategies for teachers. *Educatia, 21*(25), 161-166.

16. Griva, E., Semoglou, K., & Geladari, A. (2010). Early foreign language learning: Implementation of a project in a game-based context. *Procedia - Social and Behavioral Sciences, 2*(2), 3700-3705.

17. Immordino-Yang, M. H., & Damasio, A. (2007). We feel, therefore we learn: The relevance of affective and social neuroscience to education. *Mind, Brain, and Education, 1*(1), 3-10.

18. Jalongo, M. R. (2015). An attachment perspective on the child-dog bond: Interdisciplinary and international research findings. *Early Childhood Education Journal, 43*(5), 395-405.

19. Krashen, S. (1982). *Principles and practice in second language acquisition*. Pergamon.

20. Kruger, K. A., & Serpell, J. A. (2010). Animal-assisted interventions in mental health: Definitions and theoretical foundations. In: A. H. Fine (ed.), *Handbook on animal-assisted therapy: Theoretical foundations and guidelines for practice* (3rd ed., pp. 33-48). Academic Press.

21. Lightbown, P. M., & Spada, N. (2021). *How languages are learned* (5th ed.). Oxford: Oxford University Press.

22. MacIntyre, P. D. (2007). Willingness to communicate in the second language: Understanding the decision to speak as a volitional process. *The Modern Language Journal, 91*(4), 564-576.

23. Nation, P. (2018). Reading a whole book to learn vocabulary. *ITL - International Journal of Applied Linguistics, 169*(1), 30-43.

24. Nijakowska, J. (2010). *Dyslexia in the foreign language classroom* (Vol. 51). Multilingual Matters.

25. Paivio, A. (2007). *Mind and its evolution: A dual coding theoretical approach*. Lawrence Erlbaum Associates.

26. Schmitt, N. (2010). *Researching vocabulary: A vocabulary research manual*. London: Palgrave Macmillan.

27. Seidlhofer, B. (2013). *Understanding English as a lingua franca*. Oxford: Oxford University Press.

28. Shaywitz, S. (2003). *Overcoming dyslexia: A new and complete science-based program for reading problems at any level*. Alfred A. Knopf.

29. Snowling, M. J., & Hulme, C. (2012). Interventions for children's language and literacy difficulties. *International Journal of Language & Communication Disorders, 47*(1), 27-34.

30. Swanson, H. L., Harris, K. R., & Graham, S. (2013). Overview of foundations, causes, instruction, and methodology in the field of learning disabilities. In: H. L. Swanson, K. R. Harris, & S. Graham (eds.), *Handbook of learning disabilities* (pp. 3-14). Guilford Press.

31. Tissen, I., Hergovich, A., & Spiel, C. (2007). School-based social training with and without dogs: Evaluation of their effectiveness. *Anthrozoös, 20*(4), 365-373.

32. Verhoeven, R., Butter, R., Martens, R., & Enders-Slegers, M. J. (2023). Animal-assisted education: Exploratory research on the positive impact of dogs on behavioral and emotional outcomes of elementary school students. *Children, 10*(8), 1316.

33. Webb, S. (2007). The effects of repetition on vocabulary knowledge. *Applied Linguistics, 28*(1), 46-65.

34. Westwood, P. S. (2008). *What teachers need to know about reading and writing difficulties*. Australian Council for Educational Research.

HOMESCHOOLED TEENAGERS' METAPHORS REGARDING THEIR EDUCATION

Ari Neuman
Western Galilee Academic College
ISRAEL
e-mail: arin@wgalil.ac.il

Oz Guterman
Western Galilee Academic College
ISRAEL

Efrat Gill
Western Galilee Academic College
ISRAEL

Abstract

This study offers a unique perspective on the educational experiences of homeschooled teenagers by analyzing metaphors they used to describe learning. Unlike previous research that focuses on parents and statistical data, this research centers on the teenager's own voices.

The interviews reveal clear distinctions between three domains:
- o Learning was described in positive terms as food, a river, a tree, or a key.
- o Home Schooling was depicted as dynamic, diverse, and empowering—like a horse, a cake, or a journey without a guide.
- o School Education was described with metaphors of control and alienation—such as a ruler and an assembly line.

The metaphors reflect a generally positive view of learning and homeschooling, in contrast to a negative perception of traditional schooling. The presentation will explore the findings and their implications.

THE IMPORTANCE OF MICROFOUNDATIONS IN SHAPING DYNAMIC CAPABILITIES

Iwona Otola
Faculty of Management, University of Economics in Katowice
ul. Bogucicka 3a, 40-287 Katowice, POLAND
e-mail: iwona.otola@uekat.pl

Abstract

The concept of dynamic capabilities (DC) based on the assumptions of resource-based theory, in contrast, takes into account changes in the environment and uses organizational learning theory, emphasizing the adaptive skills of the enterprise. The main assumption of dynamic capabilities is the reorientation or creation of a new resource base of the enterprise, which should translate into the achievement of competitive advantage. In most scientific papers, dynamic capabilities are presented on a theoretical basis highlighting their ontological elements. A conceptualization of DCs for analytical purposes is presented by Tecce (2007) who points to three key categories related to capabilities, i.e. (1) sensing, (2) seizing and (3) reconfiguring. These capabilities are based on microfoundations, representing the distinct skills, processes, procedures, organizational structures, decision rules, and disciplines. The research topic discussed in this paper considers the above categories of dynamic capabilities from the perspective of high-growth enterprises (HGE) and the IT sector. Both groups of enterprises are characterized by high innovation, dynamic development, and rapid response to market changes and adaptation to market requirements.

The main scientific aim of this paper is to assess the key categories of dynamic capabilities in high-growth enterprises and IT companies. Significant variables were identified in each category, and the interrelationships between these variables were also analyzed. The empirical research was conducted based on data obtained from surveys in 2023 on 252 Polish high-growth enterprises. The conducted empirical research contributes to a deeper understanding of the differences in the use of dynamic capabilities between HGE enterprises and companies from the IT sector. Across all examined categories (SEN, SEI, REF), HGEs achieved higher average scores, indicating a greater level of advancement in this domain. These differences, although noticeable, are moderate in nature and do not reflect fundamentally different approaches to responding to market changes.

Keywords
sensing, seizing, reconfiguring, high-growth enterprises, IT sector

THE IMPACT OF DIGITAL LITERACY ON POVERTY ALLEVIATION: A QUALITATIVE STUDY IN VIETNAM

Loan Ngoc Tuong Pham
Penn State University-Scranton
Pennsylvania, USA
e-mail: lnp16@psu.edu

Minh Nhat Nguyen
RMIT University
Ho Chi Minh City, VIETNAM
e-mail: minh.nguyen244@rmit.edu.vn

Nhan Truong Thanh Dang
Ho Chi Minh University of Banking
Ho Chi Minh City, VIETNAM
e-mail: nhandtt@hub.edu.vn

Lam Dang Nguyen
Commonwealth University of Pennsylvania
Pennsylvania, USA
e-mail: lnguyen@commonwealthu.edu

Abstract

Digital literacy (DL) plays a vital role in empowering small businesses entrepreneurs to navigate the ever-evolving business landscape, stay competitive, and create innovative solutions that resonate with their customers (Nambisan, 2017). Drawing from Social Cognitive Career Theory (SCCT) and Human Capital Approach (HCA), this study investigated the influence of DL on digital entrepreneurial mindset (DEM) and how it contributes to poverty reduction through digitally based ventures in Danang city, Vietnam. Through the exploratory research design and thematic analysis, in-depth interviews were conducted with 11 entrepreneurs from various socio-economic backgrounds. The findings indicate a significant impact of DL on DEM, facilitating poverty reduction through digitally based venture innovation. The study reveals that enhanced digital skills can increase entrepreneurial self-efficacy, goal orientation, and outcome expectations. This study is among the first to examine the impact of DL on DEM and the contribution of DEM to poverty reduction through digitally based venture innovation in Vietnam, paving the way for further research to empirically justify the contribution of entrepreneurs' DL to poverty reduction.

Keywords
digital entrepreneurial mindset, digital literacy, entrepreneurial innovation, poverty reduction, Vietnam.

References

1. Nambisan, S. (2017). Digital entrepreneurship: toward a digital technology perspective of entrepreneurship. *Entrepreneurship Theory and Practice, 41*(6), 1029-1055.

BRAZILIAN SOVEREIGN SUSTAINABLE BONDS: THE 2023 AND 2024 ISSUES AND THEIR IMPACTS

Rosalia Maria Tereza Sergi Agati Camello
Pontifícia Universidade Católica de São Paulo
São Paulo, BRAZIL

Cristina Helena Pinto de Mello
Pontifícia Universidade Católica de São Paulo
São Paulo, BRAZIL
e-mail: chpm@pucsp.br

Gabriel Calazans Almeida
Pontifícia Universidade Católica de São Paulo
São Paulo, BRAZIL

Abstract

In 2023, Brazil entered the sustainable sovereign bond market, reinforcing its commitment to sustainability. This study analyzes the Brazilian Framework for Sustainable Sovereign Bonds and evaluates the impact of the inaugural issuances in 2023 and 2024. Using documentary analysis of reports from the Sovereign Sustainable Finance Committee (CFSS), international expert reviews, and financial data, the research finds that the two operations raised USD 4 billion, allocated to environmental preservation, energy transition, and social inclusion. The issuances demonstrate high transparency and alignment with ICMA principles, strengthening global investor confidence. The findings suggest that Brazil has established credibility in sustainable finance and, with the forthcoming Sustainable Taxonomy and related initiatives in 2025, is well positioned to expand its participation in this market.

Keywords
Brazilian sustainable sovereign bonds, sustainable sovereign finance, ESG Investment, Sovereign Sustainable Finance Committee (SSFC)

1. INTRODUCTION

Sustainable bonds (green, social, and sustainability) are debt instruments that finance expenditures and projects with environmental and social benefits. They are innovative financial tools widely adopted by sovereigns, corporations, and multilateral institutions to support environmental and social initiatives. In November 2023, Brazil became the eighth country in Latin America to issue a sustainable sovereign bond. The cumulative global issuance of sustainable bonds in 2023 reached USD 4.9 trillion, while issuances in Latin America and the Caribbean totaled USD 157 billion, of which sovereign bonds represented 47% (USD 73 billion). Brazil entered this market with a USD 2 billion issuance, raising a net amount of USD 1.97 billion.

The Brazilian Sustainable Bond Framework is aligned with the use-of-proceeds principles set out in the Green Bond Principles, Social Bond Principles, and Sustainability Bond Guidelines of the International Capital Market Association (ICMA). Brazil's sovereign sustainable bond issuances are embedded in a broader agenda, the Ecological Transformation Plan, launched at the 2023 United Nations Climate Change Conference (COP28). The plan is structured around six interdependent axes, each comprising a set of measures and instruments: (i) Sustainable Finance, (ii) Technological Advancement, (iii) Bioeconomy and Agrifood Systems, (iv) Energy Transition, (v) Circular Economy, and (vi) Green Infrastructure and Climate Change Adaptation.

By analyzing Brazil's first two sovereign sustainable bond issuances, this study seeks to examine the Brazilian Sustainable Sovereign Bond Framework and assess its contribution to the country's commitments under international climate agreements and national environmental targets.

2. BRAZILIAN REGULATORY FRAMEWORK

Brazil has been strengthening its climate agenda by adopting ambitious targets for reducing greenhouse gas (GHG) emissions, tackling deforestation, and expanding renewable energy sources, positioning itself as a potential global leader in the energy transition. Among its commitments, Brazil has adhered to the 2030 Agenda, a global action plan signed in 2015 that encompasses 17 Sustainable Development Goals (SDGs), including climate change mitigation, poverty and hunger eradication, inclusive education, and gender equality.

At the 21st Conference of the Parties (COP21) to the United Nations Framework Convention on Climate Change (UNFCCC), Brazil ratified the Paris Agreement, which aims to strengthen the global response to climate change and enhance countries' adaptive capacities. Signatory states committed to limiting the increase in global average temperature to well below 2°C above pre-industrial levels, while pursuing efforts to restrict the rise to 1.5°C. To meet these objectives, governments developed their Nationally Determined Contributions (NDCs), outlining climate actions considered feasible within their social and economic contexts. Brazil's NDCs include ambitious goals for emissions reduction and sustainable development.

In order to mobilize resources for socio-environmental projects within a well-established

financial market, the Federal Government developed the Brazilian Sustainable Sovereign Bond Framework. This framework provides guidance for the issuance of sovereign debt instruments linked to budgetary expenditures that directly contribute to sustainable development.

The framework was designed in alignment with ICMA's thematic bond guidelines—the Green Bond Principles, Social Bond Principles, and Sustainability Bond Guidelines—which establish global best practices for debt issuance aimed at social and environmental purposes, ensuring transparency and disclosure. In addition, Federal Decree No. 11,532 of May 16, 2023, created the Sovereign Sustainable Finance Committee (CFSS) within the Ministry of Finance. The CFSS is a permanent collegiate body responsible for planning, drafting, and implementing the framework, as well as preparing allocation and impact reports following sovereign sustainable bond issuances.

2.1. Brazilian Sustainable Sovereign Bond Framework

Sustainable bonds are instruments that enable the mobilization of resources to finance projects and budgetary programs generating positive environmental and/or social impacts. The framework establishes Brazil's commitments as a sovereign issuer, including the transparent and responsible allocation of net proceeds to eligible expenditures that foster sustainability, contribute to climate change mitigation, preserve natural resources, and promote social development. Issuances by the Federative Republic of Brazil comply with the use-of-proceeds principle, whereby net proceeds are allocated to expenditures that deliver environmental and/or social benefits.

2.2. Eligible Bond Categories

The framework defines three categories of thematic sovereign debt instruments:
- o Green Bonds: debt instruments whose net proceeds are allocated exclusively to finance, in whole or in part, environmentally beneficial expenditures;
- o Social Bonds: debt instruments whose net proceeds are allocated exclusively to finance, in whole or in part, socially beneficial expenditures;
- o Sustainability Bonds: debt instruments whose net proceeds are allocated exclusively to finance, in whole or in part, expenditures that generate both environmental and social benefits.

The framework follows internationally recognized voluntary guidelines that promote transparency, disclosure, and integrity in sustainable finance:
- o International Capital Market Association (ICMA) Green Bond Principles (2021);
- o International Capital Market Association (ICMA) Social Bond Principles (2023);
- o International Capital Market Association (ICMA) Sustainability Bond Guidelines (2021).

These guidelines assist issuers and investors in structuring and assessing green, social, and sustainability bonds, ensuring that such instruments effectively finance projects contributing to environmental and/or social sustainability.

A) The main principles encompass four dimensions
  o Use of Proceeds: The net proceeds from the bond issuance (or equivalent) must be allocated to finance or refinance pre-defined expenditures that generate clear environmental and/or social benefits. The allocation of net proceeds must be identified and described in the bond documentation.
  o Process for Project Evaluation and Selection: Issuers must establish a transparent process for evaluating and selecting expenditures to be financed with the net proceeds, identifying their sustainability objectives, taking into account environmental and/or social impacts, eligibility criteria, and potential associated risks.
  o Management of Proceeds: Issuers must establish mechanisms to appropriately track and manage the allocation of net proceeds, including the provision of regular reports on their allocation and ensuring that proceeds are not used multiple times as backing for sustainable financing—thus avoiding double counting.
  o Reporting: Issuers are encouraged to publish regular reports on the use of net proceeds and the criteria applied for eligibility and selection, until bond maturity or full allocation of proceeds. Reports should also include qualitative indicators and, where possible, quantitative indicators, measuring environmental and/or social impacts.

These principles serve as best-practice guidelines to promote consistency and transparency in the green, social, and sustainability bond markets. They assist investors in identifying investments that align with the sustainability objectives underlying the bonds and ensure that the capital raised is applied to expenditures that deliver tangible environmental and/or social benefits.

B) Use of Proceeds
  o Allocation of Net Proceeds: The net proceeds from the issuance of Brazilian Sustainable Sovereign Bonds, under the Framework, shall be virtually allocated (virtual allocation) to federal expenditures associated with activities that generate: (i) environmental benefits, consistent with the Green Bond Principles; (ii) social benefits, consistent with the Social Bond Principles; or (iii) combined environmental and social benefits, consistent with the Sustainability Bond Guidelines.
  o Eligible Expenditures: By establishing transparent, standardized criteria aligned with international best practices, the Framework ensures integrity, accountability, and investor confidence. Eligible expenditures must be linked to budgetary units of the Executive Branch and included in the Annual Budget Laws (Lei Orçamentária Anual – LOA). These categories represent expenditures deemed appropriate and consistent with the sustainability objectives established under the Framework. The clear definition of eligible expenditure is crucial to ensure that resources raised are directed to budgetary programs that generate positive environmental and/or social impacts. In terms of expenditure nature, both current and capital expenditures (investment and financial outlays) are eligible.

In exceptional cases, personnel expenditures may also be considered, provided they are directly related to environmental, social, or sustainable benefits explicitly defined under the Framework. Eligible expenditures may include both discretionary and mandatory primary expenditures, as well as financial expenditures.

C) Categories of Eligible Expenditures Includes

- o Operational expenditures.
- o Investments in tangible assets, such as land, buildings, infrastructure, energy efficiency, and public works.
- o Subsidies, tax credits, and tax exemptions.
- o Public infrastructure maintenance costs;
- o Investments in intangible assets, such as research, innovation, human capital, and organizational capacity.
- o Temporal scope.
- o Recent expenditures (refinancing): budgetary expenditures executed under the LOA up to 12 months prior to issuance (eligible retroactively to January 2023).
- o Current expenditures: expenditures planned under the LOA in force at the time of issuance.
- o Future expenditure: to be executed within 24 months following the issuance.

It should be noted that eligible expenditures support the issuance of Sustainable Sovereign Bonds under the Framework, but the net proceeds do not constitute a funding source directly tied to specific budgetary programs, given that the allocation is made on a notional equivalent basis.

D) Process for Expenditure Evaluation and Selection
The process of evaluating and selecting eligible expenditures is fundamental to achieving the objectives associated with Brazil's sustainability commitments and its targets for climate change mitigation and social inequality reduction, in line with the Sustainable Development Goals (SDGs) and ICMA's principles for sustainable bond issuance. The Sovereign Sustainable Finance Committee (CFSS), established under Federal Decree No. 11,532 of May 16, 2023, plays a central role in this process. The CFSS is a permanent interministerial collegiate body responsible for planning, implementing, and monitoring the Framework, as well as overseeing sustainable bond issuances.

E) Mandate of the CFSS
- o Draft the Brazilian Framework for Sustainable Sovereign Bond Issuances;
- o Identify expenditures that meet the eligibility criteria defined in the Framework;
- o Define exclusion criteria and processes to assess and manage environmental and/or social risks associated with expenditures;
- o Monitor the implementation of the Framework;
- o Prepare allocation and impact reports, as well as other documentation related to sovereign sustainable bond issuances.
- o The interministerial composition of the CFSS fosters strategic alignment by ensuring that eligible expenditures are consistent with Brazil's sustainability agenda, while enhancing transparency and robustness in decision-making processes.

F) Eligibility Criteria
The Framework defines 17 eligible areas for expenditure allocation:
- o Pollution Prevention and Control – GHG Emission Reduction
- o Pollution Prevention and Control – Solid Waste Management
- o Renewable Energy

- o Energy Efficiency
- o Clean Transportation
- o Sustainable Management of Natural and Living Resources and Land Use
- o Terrestrial and Aquatic Biodiversity
- o Sustainable Water and Wastewater Management
- o Climate Change Adaptation
- o Products, Technologies, and Production Processes for the Circular Economy
- o Socioeconomic Development and Empowerment – Poverty Alleviation
- o Socioeconomic Development and Empowerment – Combating Discrimination
- o Food Security and Sustainable Agrifood Systems
- o Job Creation
- o Access to Affordable Housing
- o Access to Basic Infrastructure – Urban Development and Mobility
- o Access to Basic Infrastructure – Universalization of Sanitation Services

Before allocation of proceeds, CFSS member ministries must provide the necessary information to validate the eligibility of expenditures under the LOA, in accordance with the Framework's use-of-proceeds criteria. They must also supply data demonstrating the feasibility of monitoring environmental and/or social benefits, in line with the Framework's transparency and impact provisions. Based on this information, the CFSS determines the final portfolio of eligible expenditures associated with each sovereign sustainable bond. During the allocation process, the CFSS supervises compliance with eligibility and exclusion criteria. Expenditures found non-compliant are removed from the portfolio and replaced with alternative eligible expenditures.

3. MANAGEMENT OF SUSTAINABLE SOVEREIGN BONDS

Each Sustainable Sovereign Bond will be associated with a portfolio of eligible expenditures, selected according to the Framework's Use of Proceeds and Evaluation and Selection processes. Prior to each issuance, the National Treasury Secretariat (STN) will publish a note disclosing the estimated proportion of recent (refinanced), current, and/or future expenditures linked to each bond, as well as the expected disbursement period and the allocation breakdown by green, social, and/or sustainability categories. Unallocated net proceeds (virtual allocation) will be managed in compliance with public debt management and Treasury cash management regulations. The management of eligible expenditures will ensure that an amount at least equivalent to the net proceeds is allocated to eligible expenditure.

3.1. Responsibilities of the CFSS in Bond Management

Verify that the budgetary amounts allocated to eligible expenditures are equal to or greater than the net proceeds of the issuance. Ensure that, in cases of co-financing (e.g., loans from multilateral organizations or international cooperation agreements), double counting does not occur. During allocation, expenditures that violate eligibility or exclusion criteria, or that are subject to budgetary contingencies, shall be excluded and replaced with other

expenditures meeting the Framework's requirements. The CFSS will seek to allocate net proceeds within 24 months of each issuance. Transparency in the allocation of proceeds and in reporting the social and/or environmental impacts is a cornerstone of the sustainable bond issuance process. Good practices require clear and reliable disclosure on the use of proceeds and allocation criteria, as well as the communication of environmental, social, and governance (ESG) impacts through performance indicators and regular reporting. This ensures effective evaluation of initiatives against stated objectives, reinforces investor confidence, and strengthens Brazil's commitment to sustainable development.

Debt service (interest and principal) on Sustainable Sovereign Bonds issued under the Framework is the responsibility of the National Treasury and carries the same credit rating as other sovereign debt securities issued by the Treasury. Investors bear no risk associated with the underlying portfolio of eligible expenditures.

4. ALLOCATION AND IMPACT REPORT

The CFSS is the Committee responsible for consolidating and publishing the Allocation and Impact Report (RAI) for the National Treasury's sustainable bond issuances. The reports must be published annually, until the maturity of the transaction or until the net proceeds of these bonds are fully allocated. The first publication must be made within one year of the issuance of the respective bond and subsequent publications every 12 months. The reports must be publicly available on the website of the National Treasury Secretariat. However, if confidentiality agreements limit the level of detail that can be published, the information will be presented in aggregate form.

The CFSS member ministries are responsible for providing the necessary information for the RAI, particularly given the need to verify the correlation between eligible expenditure categories and budgetary schedules. This information will include:
- o Amount disbursed by expenditure category;
- o Amount disbursed by expense type (current expenses, investments, and financial investments), both in absolute (R$) and relative (% of the total bond) terms; Amount disbursed for recent expenses (reimbursement) and for current expenses, both in absolute (R$) and relative (% of the total bond) terms;
- o Amount disbursed by expense category[1] in relation to total expenses associated with other financing sources (%), identifying the proportion of co-financing;
- o Remaining balance of unallocated net resources, both in absolute (R$) and relative (% of the total bond) terms.

The CFSS is also responsible for monitoring the implementation of the Framework, including gathering information from its members regarding the impacts and results associated with the environmental and/or social benefits of the activities financed by the Sustainable Bonds. This information will include the assumptions and methods adopted to prepare the information. In November 2024, the CFSS issued the first Allocation and Impact Report (RAI 2024) of the first two issuances of Sustainable Sovereign Bonds of the Federative Republic of Brazil, carried out in November 2023 and June 2024.

The Allocation and Impact Report/2024 was developed with the support of the Inter-American Development Bank (IDB), the World Bank, the United Nations Development Program (UNDP), and the ERM. It presents the allocation of resources, in an amount equivalent to that raised for budgetary programs and specific projects, also highlighting the impacts expected to date, as provided for in the Brazilian Framework for Sustainable Sovereign Bonds, and in accordance with international best practices. The Report includes the individual allocation of proceeds from Brazil's first and second sustainable bond issuances, issued in November 2023 and June 2024, respectively, and covers the period from January 2023 to July 2024.

The section indicates the amounts allocated by issuance, by current/future expenditures and recent expenditures (refinancing), by nature of expenditures, and by expenditure category (environmental and social), ensuring compliance with the Framework.

Since the publication of the Brazilian Framework for Sustainable Bonds in October 2023, the Brazilian government has issued a total of US$4 billion in the international market in two sustainable bonds, aligned with best practices for the use and management of proceeds associated with the issuance, as provided for in the Framework. Details of the issuances are presented in Table 1.

Table 1: Panorama das emissões sustentáveis

	1ª Emission Global 2031	2ª Emissã Global 2031
Emission	13/11/2023	20/06/2024
Maturity	18/03/2031	22/01/2032
Cupom a.a	6,25%	6,13%
Annual Rate of Return	6,50%	6, 38%
Amount Issued US$ Bi	2,00	2,00
Recursos Líquidos da Emissão US$ bilhões	1,97	1,97
Exchange Rate Recursos Líquidos da Emissão	4,89	5,51
R$ bilhões	9,62	10,83

Source: Brazilian National Treasury

The international issuances of sustainable sovereign bonds by the Brazilian Government, carried out in November 2023 and June 2024, were based on Pre-Issuance Reports with Indicative Allocation of Proceeds, published in October 2023 and May 2024, respectively. These documents outlined the expenditure categories defined in the Framework that served as reference for each issuance by the Federative Republic of Brazil, as well as the minimum and maximum amounts to be allocated to each theme, disaggregated by time frame and expenditure category.

This report includes the individualized allocation of proceeds from Brazil's first and second

sustainable bond issuances, conducted in November 2023 and June 2024, respectively, covering the period from January 2023 to July 2024. It details the amounts allocated per issuance, distinguishing between current/future expenditures and recent expenditures (refinancing), as well as by expenditure type and category (environmental and social), thereby ensuring compliance with the Framework.

The First Allocation and Impact Report/2024 indicates a total of BRL 10.11 billion allocated to eligible expenditures under the two issuances carried out by the National Treasury. Of this amount, BRL 5.78 billion is associated with the Global 2031 bond, corresponding to 60.12% of the net proceeds from the first issuance, with BRL 1.93 billion allocated to environmental expenditures and BRL 3.85 billion to social expenditures. With respect to the Global 2032 bond, the report indicates BRL 4.33 billion in social expenditures, corresponding to 40% of the net proceeds from the second issuance.

Table 2: Amounts allocated to the first and second issuances in the first report

	1ª Emission (R$ Bi)	% Total Bonds	2ª Emission (R$ Bi)	% Total Bonds
Environmental Expenses	1,93	20,12	-	-
Social Expenditures	3,85	40,00	4,33	40,00
Total Allocated	5,78	60,12	4,33	40,00
Net Resources/ Emission	9,62	100	10,83	100

Source: Sistema Integrado de Administração Financeira do Governo Federal (SIAFI), BNDES e Tesouro Nacional

Regarding the timeframe, the indicative breakdown for each issuance is that a maximum of 25% should be dedicated to refinancing already incurred expenses. Regarding the breakdown by expense category, the allocation of the amount equivalent to the issuances must follow the indicative allocation ranges for environmental and social expenses, calculated as a proportion of the issuance's total net proceeds. Regarding the classification by expense nature—a budgetary term used in Brazil to group expense items with the same characteristics regarding the expenditure object—the expenses presented in the allocation report can be classified as (i) investments; (ii) financial investments; and (iii) other current expenses. Charts 1 and 2, below, demonstrate the allocations of the first and second issuances, by expense nature.

*Figure 1: Classificação da 1ª emissão por natureza de despesa*

■ 1) Balanço Remanescente 39,9%   ■ 2) Inversões Financeiras 5,6%
■ 3) Investimentos 0,1%   ■ 4) Outras Despesas Correntes e Investimentos 15%
■ 5) Outras Despesas Correntes 39,4%
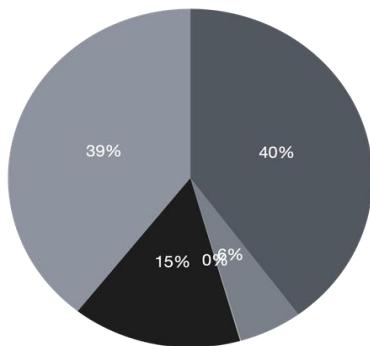
Source: Sistema Integrado de Administração Financeira do Governo Federal (SIAFI) e BNDE

Figure 2: Classificação da 2ª emissão por natureza de despesa

■ 1) Balanço Remanescente 60%
■ 2) Inversões Financeiras - 0
■ 3) Investimentos 2,52%
■ Outras Despesas Correntes e Investimentos 1,42%
■ Outras Despesas Correntes 36,06%%
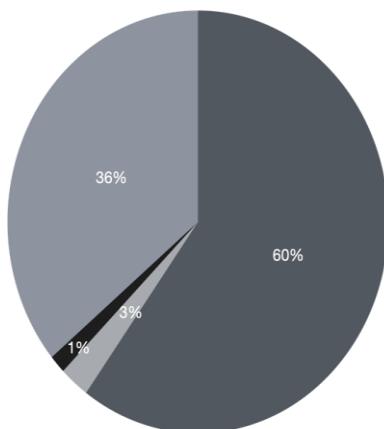
Source: Sistema Integrado de Administração Financeira do Governo Federal (SIAFI) e BNDES

In its detailed analysis, the report provides a comprehensive overview of the environmental and social benefits generated by sovereign issuances, with the objective of delivering clear and reliable information to investors and society regarding the outcomes achieved. Among the main highlights, in the environmental sphere, resources were allocated to initiatives focused on biodiversity preservation, sustainable resource and land management, climate change adaptation, and, through the National Climate Change Fund (Fundo Clima), the promotion of renewable energy and clean transportation. In the social sphere, resources were directed toward poverty alleviation, food security, and access to basic infrastructure.

The funded initiatives are expected to generate measurable positive impacts, such as an increase in the share of clean energy in the country's energy matrix, the expansion of land regularization rates for Indigenous territories, and the growth of protected terrestrial and marine areas. These indicators and targets are aligned with the medium-term strategy established in the Federal Government's Multi-Year Plan 2024–2027, and they also contribute to the achievement of the United Nations Sustainable Development Goals (SDGs) and the 2030 Agenda.

The data can be further examined in the 2024 Allocation and Impact Report and, complementarily, in reports and spreadsheets related to the various projects and funds managed by the Federal Government, accessible through the references indicated throughout the report.

5. THIRD-PARTY VERIFICATION

It is important to note that complementary information concerning the budgetary execution of eligible expenditures and their compliance with the Framework must be verified by an independent third party. Specifically, this must be a specialized institution with expertise in environmental and/or social matters, contracted to assess whether resource utilization is consistent with the expenditure categories defined in the Framework with respect to both Use of Proceeds and Management of Proceeds.

The Federative Republic of Brazil engaged Sustainalytics—an institution specializing in Second Party Opinions for the issuance of green, social, and/or sustainable bonds—to review Brazil's Sustainable Sovereign Bond Framework and to provide an independent opinion on its environmental and social credentials, as well as its alignment with the Sustainability Bond Guidelines (SBG, 2021), the Green Bond Principles (GBP, 2021), and the Social Bond Principles (SBP, 2023).

In line with market standards for Sustainable Bond issuances, the Federal Government submitted the Framework for external review by Morningstar Sustainalytics prior to issuing its first Sustainable Bond, thereby providing investors with greater assurance regarding transparency and the alignment of net proceeds with best market practices.

6. CONCLUSION

This study set out to examine the Brazilian Framework for Sustainable Sovereign Bonds and assess its impact on Brazil's commitments under international climate agreements and its environmental targets, through an analysis of the country's first two issuances of Sustainable Sovereign Bonds. The following documents were analyzed: (i) the Brazilian Framework for Sustainable Sovereign Bonds, published in October 2023; (ii) the Pre-Issuance/Indicative Allocation Report, issued by the Sovereign Sustainable Finance Committee (CFSS) in May 2024; (iii) the 2024 Allocation and Impact Report, issued by CFSS in November 2024; (iv) Capital Flows to Latin America and the Caribbean: 2023 Year-in-Review and Early 2024 Developments, published by ECLAC in 2024; and (v) the Annual Second Party Opinion issued

by Morningstar Sustainalytics on October 22, 2024.

The analysis confirms that the development of the Brazilian Framework for Sustainable Sovereign Bonds adhered to internationally recognized best practices. The process benefited from the support of international organizations, including the World Bank and the Inter-American Development Bank (IDB), among others. Additionally, minutes from CFSS meetings provided insights into favorable impressions expressed by international investors during the roadshow promoting the bond issuances, particularly with respect to transparency, innovation, and the robustness of the Pre-Issuance Report. These same minutes also noted areas for improvement, especially regarding systems for access to budgetary information, in order to enhance transparency and timeliness for investors.

It should be noted that, of the total USD 73 billion in sustainable sovereign bonds issued across Latin America and the Caribbean in 2023, Brazil's inaugural issuance accounted for only USD 2 billion, or 2.7%. The sources consulted did not provide any explicit explanation or evaluation for the relatively modest scale of Brazil's issuance. In the international context, the presence of a stronger institutional and regulatory framework can facilitate and support sovereign sustainable bond issuance, alongside factors such as issuer credit ratings and associated remuneration rates.

In its second issuance, Brazil's Sustainable Sovereign Bonds recorded a spread of 212.8 basis points (2.128 percentage points) above U.S. Treasuries, with demand totaling USD 4.7 billion for an offer of USD 2 billion, of which 77% was acquired by investors from Europe and the United States.

The Federal Government is currently developing the Brazilian Sustainable Taxonomy, the Brazil 2050 Strategy, and the updated Climate Plan, which are expected to be formalized in 2025 during the United Nations Climate Change Conference (COP30), to be held in Belém, State of Pará. These instruments—together with forthcoming legislation on the regulated carbon market—are expected to serve as major drivers for new issuances of Brazilian sustainable sovereign bonds.

The current issuances and the allocations already executed demonstrate Brazil's potential for further operations, particularly when compared to the scale of allocation opportunities available domestically relative to the broader Latin American context. A particularly useful line of inquiry would be scenario-based studies of potential international fundraising through future issuances of Brazilian Sustainable Sovereign Bonds, and their role in financing energy transition projects in specific sectors of the Brazilian economy.

Notes
1. Source: The World Bank; Treasury | IBDR - IDA
2. The Paris Agreement is a global treaty adopted in December 2015 by the signatory countries of the United Nations Framework Convention on Climate Change (UNFCCC) during the 21st Conference of the Parties (COP21). The Agreement governs measures aimed at reducing carbon dioxide emissions, strengthening the response to the threat of climate change, and enhancing countries' capacity to manage the impacts resulting from these changes.
3. Allocation in equivalent value (virtual allocation) is carried out by demonstrating that liquid resources equivalent to the issued bond have been or will be allocated to eligible expenditures, without direct linkage and without constituting a new budgetary source.

4. Federal budgets:
The Annual Budget Law (LOA) constitutes the official budget, a law that estimates revenues and sets public expenditures for a fiscal year. It includes all Federal Government expenditures, and its draft must be submitted to the National Congress by August 31 each year. It is part of the federal budget framework established by the 1988 Federal Constitution. This framework contains three key elements:
   a) **Pluriannual Plan (PPA)**: establishes the guidelines, objectives, and targets of the federal public administration for capital expenditures and related expenses, as well as for continuing programs. The PPA is prepared every four years, always in the first year of the presidential term;
   b) **Budget Guidelines Law (LDO)**: includes the goals and priorities of the federal public administration, establishes fiscal policy guidelines and corresponding targets, in line with the sustainable trajectory of public debt, and guides the preparation of the Annual Budget Law. The LDO is prepared annually;
   c) **Annual Budget Law (LOA)**: encompasses the fiscal budget related to the Powers of the Union, its funds, agencies, and entities of direct and indirect administration, including foundations established and maintained by the Public Authority; investment budgets of companies in which the Union holds the majority of voting capital, directly or indirectly; and the social security budget, covering all associated entities and bodies, both direct and indirect administration, as well as funds and foundations established and maintained by the Public Authority.
5. It should be noted that, within the Framework, the term "expenditure category" should be understood broadly as a general grouping of expenditures based on their environmental and/or social benefits, and should not be confused with the "economic category of expenditure," which is a specific and distinct classification within the Union's Budgets.
6. UN Agenda 2030: a guide produced under the United Nations for the international community and a roadmap for steering the world toward a more sustainable and resilient path by 2030.
7. A complete and detailed database on resource allocation is consolidated in the spreadsheets available at: https://sisweb.tesouro.gov.br/apex/f?p=2501:9::::9:P9_ID_PUBLICACAO_ANEXO:23760
8. To access the full report: https://sisweb.tesouro.gov.br/apex/f?p=2501:9::::9:P9_ID_PUBLICACAO_ANEXO:23761
9. Difference between the interest rate of Brazilian bonds and that of U.S. bonds.

References

1. CFA Institute. (2023). *Certificate in ESG investing curriculum 2023* (ebook).
2. Economic Commission for Latin America and the Caribbean – ECLAC. (2024). Capital flows to Latin America and the Caribbean: 2023 year-in-review and early 2024 developments (LC/WAS/TS.2024/1). Santiago: United Nations.
3. Morningstar Sustainalytics & National Treasury Secretariat. (2024, October 22). Second Party Opinion – Annual Review of the Brazilian Framework for Sustainable Sovereign Bonds. Amsterdam: Sustainalytics.
4. National Treasury Secretariat. (2023, October). Brazilian Framework for Sustainable Sovereign Bonds. Brasília: Ministry of Finance.
5. National Treasury Secretariat. (2024, November). 2024 Allocation and Impact Report. Brasília: Ministry of Finance.
6. Sovereign Sustainable Finance Committee – CFSS, National Treasury Secretariat, Ministry of Finance. (2024, May). Pre-Issuance Report of the 2nd Bond Issuance: Indicative Allocation of Resources. Brasília: Ministry of Finance.
7. Reset. (2024, June 20). Brazil raises US$ 2 billion in second sustainable bond. Reset – Capital Reset. Retrieved from https://capitalreset.uol.com.br/financas/dividaESG
8. Valor Econômico. (2023, November 13). Treasury raises US$ 2 billion in green bonds. Valor Econômico. Retrieved from https://valor-globo.com/financas/noticias/2023/11/13

LEARNING BEYOND THE CLASSROOM: OUTDOOR EDUCATION FOR ERASMUS PRE-SERVICE TEACHERS – A CASE STUDY FROM POLAND

Agnieszka Stachnik
University of Wroclaw, Institute of Pedagogy
Jana Władysława Dawida 1, 50-527 Wrocław, POLAND
e-mail: agnieszka.janik@uwr.edu.pl

Abstract

The presentation shares the findings of a study conducted during an Outdoor Education (OE) workshop held for a group of Erasmus students – pre-service primary school teachers – at the Institute of Pedagogy, University of Wroclaw (Poland), in May 2025. Fifteen students from diverse cultural backgrounds participated in the course, which was designed to explore the role and potential of OE in teacher education.

The main research question guiding the study was: *What are the participants' experiences and reflections on the OE learning process within this course?* The research aimed to uncover students' emotions, knowledge, skills, perceived challenges and difficulties, as well as the significance they attributed to nature, relationship-building, and shared values.

The course structure combined: integration activities, fieldwork, and learning based on challenges organized in natural settings. The course framed the environment and outdoor education as a dynamic, interconnected system, in which learning occurs through active experience, collaboration, and stepping beyond comfort zones (Gilbertson, Bates, McLaughlin & Ewert, 2006; Abbott & Flynn, 2022). Those components were supported by theoretical input of experiential learning as described by Dewey (Dewey, Fishman & McCarthy, 2007).

A qualitative methodology was employed, including participant observation, focused interviews, and document analysis (evaluation cards). The interviews encouraged students to reflect critically on their learning processes.

The results indicated that the students experienced effective and meaningful learning. The challenges they encountered and the reflective practice outside the traditional classroom setting were perceived as surprising and enlightening, shaping their understanding of their future roles as teachers. The findings demonstrate that authentic, thoughtfully designed OE can serve as a powerful pedagogical response to contemporary educational challenges, fostering personal growth, social connectedness, and sustainable learning.

References

1. Abbott, K., & Flynn, S. (2022). Outdoor education, interaction and reflection: A study of Irish outdoor ECEC. *Irish Educational Studies, 43*(2), 1-21.
2. Dewey, J. (1938). *Experience and Education*. New York, NY: Macmillan Company.
3. Fishman S. M., & McCarthy L. (2007). *John Dewey and the Philosophy and Practice of Hope*. Illinois: University of Illinois Press.
4. Gilbertson K., Bates T., McLaughlin T., & Ewart A. (2006). *Outdoor Education, Methods and Strategies*. Chicago, IL: Champaign, Human Kinetics.

THE EVOLUTION OF MANAGEMENT CONCEPTION: FROM AWARENESS TO THE PRACTICE BALANCED MANAGEMENT. THE BEST PRACTICE IN BALANCED VALUE CREATION

Izabela Sztangret
University of Economics in Katowice
1 Maja street, 40-227 Katowice, POLAND
e-mail: izabela.sztangret@ue.katowice.pl

Abstract

The aim of this study is to examine the regulatory evolution and practical implications of the Corporate Sustainability Due Diligence Directive (CSDD) as a transformative force in ESG implementation. The research particularly investigates how the directive shapes value creation mechanisms in firms—especially SMEs—and assesses the strategic asymmetries in ESG maturity between large companies and smaller enterprises. The analysis adopts a qualitative, regulatory-policy approach, supported by a review of empirical data and case-based insights into corporate ESG strategies. It focuses on comparative analysis of ESG implementation patterns in large firms versus SMEs, as well as on emerging value creation models within sustainable management paradigms.

The Council of the European Union's ratification of the Corporate Sustainability Due Diligence Directive (CSDD) on 24 May 2024 marks a turning point in the regulatory landscape of corporate sustainability. Initiated in 2020 and formally proposed by the European Commission in 2022, the directive has become a critical driver of ESG integration, especially within the European business context. While large enterprises increasingly institutionalize ESG practices through formal strategies and sustainability units, SMEs often struggle with limited resources, ad-hoc financing, and a lack of structured implementation plans. Environmental objectives—such as climate neutrality between 2041 and 2050—dominate corporate agendas, with growing pressure on supply chains to disclose ESG data. However, SMEs face ongoing challenges in measuring and monetizing the financial impacts of their ESG actions. Amidst this, the directive reinforces compliance and stakeholder-driven sustainability as competitive levers. Research confirms that firms embracing sustainable management can generate new forms of integrated value—economic, environmental, and social—through low-carbon supply chains, circular models, and inclusive innovation ecosystems. By internalizing externalities, such companies boost efficiency, reduce systemic risks, and enhance financial resilience. The capacity to engineer sustainable value is now seen as a prerequisite for long-term competitiveness in volatile markets, highlighting the urgency of advancing both scholarly inquiry and managerial practice in this domain.

Keywords
ESG practices, sustainability, climate neutrality, ESG strategies, value creation

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