



RESEARCH ARTICLE

Curious about the circular economy? Internal and external influences on information search about the product lifecycle

Vinicio Di Iorio¹  | Francesco Testa¹ | Daniel Korschun² | Fabio Iraldo¹ | Roberta Iovino¹ 

¹Institute of Management, Scuola Superiore Sant'Anna, Piazza Martiri della Libertà 33, Pisa, 50127, Italy

²LeBow College of Business, Drexel University, 3220 Market St, Philadelphia, Pennsylvania, 19104, USA

Correspondence

Vinicio Di Iorio, Institute of Management, Scuola Superiore Sant'Anna, Piazza Martiri della Libertà 33, 50127 Pisa, Italy.

Email: vinicio.diiorio@santannapisa.it

Abstract

The advent of the circular economy has repurposed traditional consumption habits. It is expanding opportunities for consumers to preserve the ecosystem throughout the whole product lifecycle. Drawing from extant rational and moral theories in behavior change, this research extends the understanding of consumer involvement in the circular economy by investigating whether being exposed to “green” clues can trigger additional information seeking and be empowering to people to contribute to the circular economy. In contrast to some prior research that suggests that information can overload consumers, this research finds that these “green” clues can stimulate greater information seeking, which can make the consumer feel more capable of effecting change through circular economy consumption. This study draws a conceptual model for behavioral change, tested on a representative sample of 4161 individuals across the five largest European countries. Results show that external “green” clues prompt consumers' information search on product lifecycle and ultimately make them feel empowered to contribute to the circular economy. Overall the research suggests that sustainability information can stimulate heightened curiosity and encourage consumers to become willing and active participants in this burgeoning circular economy.

KEYWORDS

behavioral model, circular economy, customer engagement, product lifecycle, sustainable consumption

1 | INTRODUCTION

The burgeoning literature on the circular economy is a new, technical, and down-to-earth way of thinking about a sustainable economy (Geissdoerfer et al., 2017). It translates the nuances of sustainability tenets into more concrete, collaborative actions (Alonso-Almeida et al., 2020; Moktadir et al., 2020); those ranges, for instance, from resources efficiency throughout the entire production process, their reuse, up to designing out of waste (Perey et al., 2018). By widening

the commitment in sustainability both upstream and downstream of the production/consumption process to such a wide extent, the circular economy is meant to reconcile linear economy edges in a closed loop, from which leaks of waste are supposed to (almost) disappear. In short, waste is intended to become “food” for further productive processes (Ellen Macarthur Foundation, 2013, p. 27). Accordingly, wide-ranging changes are expected to emerge in consumer behavior. “Consumption is likely to change with respect to what consumerism and consumer goods mean to consumers, how consumers perceive

This is an open access article under the terms of the [Creative Commons Attribution-NonCommercial](https://creativecommons.org/licenses/by-nc/4.0/) License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited and is not used for commercial purposes.

© 2022 The Authors. Business Strategy and The Environment published by ERP Environment and John Wiley & Sons Ltd.

consumption, and how consumption will evolve in terms of patterns and practices as well as consumption levels” (Sijtsema et al., 2020, p. 2). In essence, the circular economy has broadened the set of environmentally responsible behaviors, by providing consumers with new insights (Gong et al., 2020; Tapaninaho & Heikkinen, 2022). This implies that the circular economy nudges consumers to change their traditional consumption habits, consciously.

In research on behavioral change for a circular economy, in both rational-choice and moral theories domains (Parajuly et al., 2020), the lack of contextual information (such as the product's eco-label, or the materials of the packaging, etc.) stands accused for preventing consumers from undertaking pro-circular economy behaviors (Boesen et al., 2019; Testa et al., 2019; Testa, Pretner, et al., 2021; Wang et al., 2020).

Conversely, though, providing consumers with contextual information (e.g., displaying ads on the news or social network that push people to purchase products with eco-labels) can turn out to be a double-edged sword: On one side, it can increase consumers' knowledge and perceived effectiveness in sustainable behavior, prompting them to act (Hosta & Zabkar, 2020; Vermeir & Verbeke, 2008); on the other one, however, those behavior changes do not last long (White et al., 2019), and there are even circumstances under which information can backfire and spur misleading speculations depending on people's background (Braman et al., 2012; White et al., 2019).

Thus, White et al.'s (2019) conceptualization of information seeking (IS) suggests that, overall, the effect of contextual information on additional IS should be modest if present at all. We extend and depart from White et al.'s (2019) conceptualization of IS somewhat. Specifically, we argue that circular economy contextual information can prompt consumers to seek more information, bolster their perceived efficacy of impacting the environment, and subsequently increase their purchase likelihood. Thus, we show that White and colleagues' assumptions may be limited in their explanatory power in the circular economy realm. In line with this general view, we also aim to understand whether people can build knowledge upon information on the embryonic concept of circular consumption through lifecycle thinking (Patwa et al., 2021).

Studies on environmentally responsible behaviors in the circular economy domain demonstrated also that people are apt to spill over virtuous behaviors in diverse areas; for instance, buying organic and recycling or choosing alternative transport (Thøgersen & Ölander, 2003). We assume that similar considerations can occur between consequential actions alongside the whole product lifecycle, not only in the act of purchase (e.g., purchasing recycled packaging instead of single-use plastic packaging) but also thereafter (e.g., recycle them properly or reuse them creatively). This set of examples, although they are different stages, they are conceived as a holistic behavior under the lifecycle thinking, on which the concept of circular consumption revolves around.

This study, therefore, draws a new behavioral model according to the tenets of the circular economy. It is hinged on the role of IS, which mediates the effect that contextual external and internal influences on consumers to forge their effectiveness in achieving such behavior changes according to the circular economy.

Study contribution is twofold; the first consists in providing a new lens of analysis that focuses on the active role of the consumers in acquiring information to better accomplish a circular economy throughout their consumption journey. The second consists in shaping a new conceptualization and measurement of such circular consumption (we named it, *lifecycle ecologically minded behavior*), namely, the multifaceted series of behaviors that—in compliance with the circular economy tenets—occur over the entire product life cycle.

2 | LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1 | Behavioral change and need to reflect IS

Recently, the online retail giant Amazon introduced a page on their website to educate and instruct consumers to recycle their packaging. Similarly, Apple announced self-service repair devices, which will provide original components and tools to customers who are comfortable performing their repairs. These examples are just a few, among the latest, explaining how corporations are prompting consumers towards new solutions for a circular economy.

The circular economy is “a regenerative system in which resource input and waste, emission, and energy leakage are minimised by slowing, closing, and narrowing material and energy loops. This can be achieved through long-lasting design, maintenance, repair, reuse, remanufacturing, refurbishing, and recycling” (Geissdoerfer et al., 2017, p. 766). Hence, the term circular economy encapsulates a kaleidoscope of actions, which require strong complicity between companies and consumers (Ellen Macarthur Foundation, 2013; Geissdoerfer et al., 2017; Murray et al., 2017). It should be noted, therefore, that the circular economy paradigm deviates from the well-known concept of green consumption (which emphasizes the “purchase” phase), since the circular economy does not only aim to make the consumption “greener” (i.e., buying sustainable products), yet extends the scope of action from mere consumption to further stages such as refashioning old garments, switching to less polluting means of transportation and recycling packaging properly, just to name a few (Borrello et al., 2017; Khan et al., 2019; Sijtsema et al., 2020; Testa, Di Iorio, et al., 2021). Consequently, we contend that the circular economy prompts a far-reaching environmentally responsible endeavor from the consumer's standpoint, by providing them product lifecycle perspective.

According to the extant literature on behavior change regarding sustainable consumption, information and knowledge are outstanding prompts for steering towards pro-environment behaviors (White et al., 2019). The main rationalist doctrines on behavior change point to the lack of information as one of the main factors preventing consumers from translating their intentions into more sustainable behaviors (Carfora et al., 2019; Carrington et al., 2010; Hassan et al., 2016; Hiller & Woodall, 2019; Hosta & Zabkar, 2020; Shaw et al., 2016; Zollo et al., 2018).

However, low adoption of sustainable behaviors can also be attributed to information overload (Horne, 2009; Neumann et al., 2012), as

well as confusion (Chen & Chang, 2013). Additionally, further research claims that in-depth information can be harmful, and spur misleading speculations: higher levels of science literacy were associated with stronger ideology-reinforcing bias, which was explained by the fact that those who knew more about science were better equipped to defend their own pre-existing beliefs (Braman et al., 2012).

Nonetheless, there are some indications that information may also trigger inquisitiveness (Yang et al., 2014). That leverages people's innate propensity for curiosity, which pushes them to seek further information. Perhaps unfortunately, empirical evidence of this inquisitiveness is still scant (Testa et al., 2020). Therefore, this study aims at unpacking whether being exposed to information about eco-friendly products ("eco-clues") triggers deliberative further IS. Also, this study aims at understanding if this further inquiry is critically questioned by consumers before it fosters self-efficacy. This cognitive pathway breaks down the knowledge formation to enact far-reaching sustainable behaviors to accomplish the circular economy principles.

2.2 | Lifecycle ecologically minded consumer

At the individual level, the circular economy promotes cooperation among different players in the market; it aims to redesign the dynamics of consumption, extending the attention also to the final disposal of the products (Kirchherr et al., 2017). By doing so, consumers become the pivotal enablers of the circular economy paradigm, because they are informed about the consequences of their purchasing and are supposed to consider them even while using and disposing of them. Being aware of this lifecycle perspective, thus, consumers undertake further behaviors coherently to the circular economy tenets. For instance, consumers can reduce the production of daily waste by purchasing products with reusable packaging, consuming those with a short expiration date, and ultimately dispose of garbage for recycling, thanks to carefully separating leftovers (Borrello et al., 2017; Kim & Choi, 2005; Saphores & Nixon, 2014; Testa et al., 2020).

To summarize, the circular economy is a multidimensional concept that has allowed green consumption to bloom and unfurl in multifaceted environmentally responsible behaviors, which unfold in sequence echoing the concept of lifecycle thinking (Patwa et al., 2021). The extant literature, perhaps unfortunately, has barely conceived them this way so far (Roberts, 1995, 1996; Sudbury-Riley & Kohlbacher, 2016).

2.3 | Hypotheses

2.3.1 | External influence (EI)

The bundle of "green" clues which influence us from the outside constitutes the concept of EI (Farooq et al., 2017). Such an EI unfolds in several ways to encourage consumers to purchase eco-friendly products. For instance, the press presents the purchase of ecological products as a positive thing; the news from the media (TV, radio, internet,

etc.) often describes buying ecological products as a good way to protect nature (Alter et al., 2019; Chen et al., 2019; Greenpeace International, 2018; WBCSD, 2018). Predictably, being exposed to such a turbine of information fosters higher people's ecological sensitivity (Bansal & Clelland, 2004; Carrington et al., 2010; El Ghoul et al., 2019; Hoelscher & Chatzidakis, 2021; Hosta & Zabkar, 2020; Thøgersen, 2006; Xu et al., 2012).

According to both rationalist and moral decision making predictive models, therefore, information plays a pivotal role in influencing behavioral change (Borhan et al., 2019; Carfora et al., 2019; Carrington et al., 2010; Hassan et al., 2016; Hiller & Woodall, 2019; Hosta & Zabkar, 2020; Shaw et al., 2016; Zollo et al., 2018). Specifically, such a massive EI can prevail upon personal opinion and translate into internalized social norms (Hosta & Zabkar, 2020). However, the most recent research has confirmed that the effect of this massive awareness-raising on environmental issues has influenced the individual attitude towards the environmental problem, but has not necessarily turned into a change in people's behavior (Bray et al., 2011; Shaw et al., 2016; Taufique et al., 2017). Nonetheless, recent studies showed that consumers are instinctively apt to react to those EIs by interacting with others (i.e., posting comments or forwarding likes) to share it and to seek more information (i.e., scrolling further news) (Roetzel, 2019; Yang et al., 2014) to gain social endorsement (Yang et al., 2014).

To summarize, although "green" clues do not necessarily translate into more sustainable consumption, they could trigger side effects in people's behavior. One of them consists in the fact that people are more inclined to search for further information on circular consumption due to "green" clues (Testa et al., 2020). Therefore, predictive models of behavioral change need to be integrated with the pivotal role of active IS, which interplays between EI and final behavior to better understand how to act sustainably. According to those premises, we postulate:

H1. EI has a positive impact on consumers' IS.

Academic literature asserts there is a robust connection between media campaigns and a person's perception of effectiveness in making decisions (Borhan et al., 2017; Borhan et al., 2019). Perceived consumer effectiveness (PCE) is "consumer's perception of the power to affect the occurrence or averseness of an event" (Hosta & Zabkar, 2020, p. 8). Previous studies proved that PCE has a positive influence on environmentally responsible willingness to behave, socially responsible willingness to behave (Hosta & Zabkar, 2020), and sustainable food consumption (Vermeir & Verbeke, 2008). Roberts (1996) asserted that, concerning sustainable behaviors, PCE stands as one of the most reliable predictors.

PCE can be enhanced by prompting consumers with specific messages and clues (White et al., 2019). For instance, research conducted in Taiwan about the media coverage on the consequences of global warming demonstrates that individuals' exposure to and attention to the media coverage of global warming has a direct positive effect on consumers' effectiveness in behaving (Huang, 2016). Similarly, consumers relying on experts' opinions on the media to understand

“green” clues (like eco-labels) translate that information into more effective pro-environmental behaviors (Castka & Corbett, 2016). Consequently, these are the hypotheses we postulate:

H2. EI has a positive impact on PCE.

2.3.2 | Novelty seeking (NS)

NS is commonly represented as the degree of dissonance between current perception and previous experience (Jang & Feng, 2007). NS is also defined as a curiosity drive, sensation seeking, and an exploring drive in behavioral science literature (Borhan et al., 2019) often associated with personal traits (Correia et al., 2008). Consumers who are drawn to novelty have a higher intrinsic incentive to seek out new stimuli; as a result, novelty seekers are frequently defined as people who dare to defy customary boundaries, take risks, and seek out fresh experiences that are outside of their everyday routines (Currie, 1997). Accordingly, it is demonstrated that this trait can trigger IS (Roetzel, 2019). Echoing Hirschman's (1980) study about the adoption of innovations, individuals with a high level of NS are more prone to monitor a wide range of media to be exposed to more information regarding that novelty.

Environmentally sustainable behaviors are connoted by a remarkable seeking for novelty (Borhan et al., 2019; Hirschman, 1980; Jang & Feng, 2007; Roetzel, 2019): It reflects the willingness to seek out far-reaching inquiries, such as checking eco-labels, the packaging material composition, or its provenance (Testa, Di Iorio, et al., 2021). For the reasons above, recent research on consumer behavior within the circular economy realm identified NS as a strong motivational driver (Borhan et al., 2019; Roetzel, 2019; Testa, Di Iorio, et al., 2021). Put simply, novelty seekers are more likely to seek further information. Therefore:

H3. NS has a positive impact on IS.

2.3.3 | Trust towards third-party certification (TPPC) and trust towards the self-declared claim

Trust is defined as the individual's expectation that someone else, like a person, a product, or even an organization, will keep promises and accomplish obligations (Perrini et al., 2010). In social sciences, generalized trust is often outlined as one of the most essential attitudinal elements of cooperation, upon which ethical decisions are based (Harring et al., 2019; Reeskens & Hooghe, 2008). Sustainable or circular consumption relate to considerations in the ethical domain, because “sustainability” or “circularity” are features that consumers cannot ascertain technically (Polonsky et al., 2012; Wang et al., 2020).

Hence, when consumers cannot objectively evaluate the item they purchase, they are pushed to rely on moral judgments to make decisions (Gigerenzer & Gaissmaier, 2011; Polonsky et al., 2012). Trust, therefore, constitutes a moral bridge through which consumers

cross over information asymmetry and end up with a final judgment that is reliable for themselves (Akerlof, 2009). Atkinson and Rosenthal (2014) demonstrate that trust towards some specific kind of information (i.e., eco-labels) eludes the need for further inquiries and evades the suspicions of greenwashing (Nyilasy et al., 2014). For instance, people can rely upon independent third-party certifiers (or self-declared claims) to trust firms' ecological commitment (Adams & Van Allen, 2010; Taufique et al., 2017), but the difference in perceptions between independent third-party certifications and self-declared claims is not clear yet (Darnall et al., 2018; Testa, Di Iorio, et al., 2021). Independent third-party certifiers might remarkably increase the reliability of the information provided, since their disclosure might be impartial, unbiased, and a valid tool of comparison between products within the same category and across different categories (Adams & Van Allen, 2010). Thus, we can imply that trust, either towards self-declared claims or third-party certifications, is likely to inhibit IS.

H4a. TPPC inhibits IS.

H4b. Trust towards self-declared claims (TSDC) inhibits IS (IS).

2.3.4 | IS and PCE

Too little or too much information can undermine peoples' capacity to feel confident in making choices (Blake, 1999; Skarmas & Leonidou, 2013; White et al., 2019). That discharges or overloads their judgmental capacity (Kahneman, 2011; Moon et al., 2017; Roetzel, 2019) and facilitates dissonance between attitude, intention, and behavior about sustainable consumption (Carrington et al., 2010; Hassan et al., 2016; Hosta & Zabkar, 2020). Therefore, we shift the focus from the mere availability of information to IS, putting the consumer's active approach to information at the center of attention.

In this purview, research asserts that IS “is a form of problem-solving” (Marchionini, 1992, p. 157); once consumers have looked for further information (solution path), they feel more aware of the matter and perceive themselves as more knowledgeable (Roberts, 1996). Also, today's ease of being exposed to “green” clues and double checking those by themselves (e.g., scrolling news, commenting posts, and more) encourages people's intuitiveness as never before (El Ghoul et al., 2019; Roetzel, 2019; Xu et al., 2012; Yang et al., 2014). Thus, the propensity to collect supplementary information (IS) can interplay in the relation between EI and PCE.

Moreover, a seminal study conducted by Roberts (1996) demonstrated that PCE is one of the most reliable factors explaining conscious consumer behaviors, such as limiting the use of products that are made of the use of scarce resources or trying to buy energy-efficient household appliances.

To summarize, PCE is a metric that assesses a person's belief in the potential of individual consumers to influence environmental resource issues (Roberts, 1996), and it is a reliable predictor of

environmentally responsible behaviors (Hosta & Zabkar, 2020; Kang et al., 2013; Kim & Choi, 2005; Vermeir & Verbeke, 2008). Therefore, we hypothesize:

H5a. IS positively influences PCE.

H5b. IS mediates the impact of EI on PCE.

2.3.5 | Critical thinking (CT)

The capacity to seek and acquire information is the basis to carry out knowledge creation and hence decision making (Choo, 2007). Nonetheless, Menichelli and Braccini (2020) disputed that information alone is not necessary to generate knowledge; human beings are supported by CT to discern and create understanding. Specifically, CT is the ability to judgmentally assess information and evaluate its reliability (Hargittai & Hinnant, 2008). It is a vital tool to survive the information overload, enhance the ability to make conscious decisions (Leyden, 2011) and eventually build knowledge (Mitchell et al., 2015). CT, therefore, is essential for consumers to analyze and skim the additional information collected, so they can reach rational awareness of feel empowered to make decisions.

In this purview, academic debate about green consumption has recognized the role of personal values, such as moral intuitions, in information processing and eventually in fostering eco-friendly behaviors (Gigerenzer & Gaissmaier, 2011; Kahneman, 2011; Zollo et al., 2018). The abundance of information collected upon “green” clues, indeed, might be triggered by a social heuristic (also, social intelligence hypothesis—Whiten & Byrne, 1997). Social heuristics are distinguished because they have as their object the evaluation of moral judgments (i.e., rating a green claim's veracity) instead of technical features (i.e., rating a product's technical characteristics). Studies on moral judgments and social heuristics have found that people tend to automatically inquire into ethical issues when they are exposed to them (Roetzel, 2019; White et al., 2019; Yang et al., 2014).

For that reason, CT should work as a “rational filter”: if consumers analyze critically the information they gathered, CT should moderate the relation between IS and PCE and vanish the aforementioned heuristic. In this regard, we present the following hypothesis:

H6. CT moderates the relation between IS and PCE. When CT is high, the impact of IS on PCE is higher than when CT is low.

2.3.6 | Environmentally responsible behavior stretches over the entire product lifecycle

Current literature states that consumers who undertake sustainable behaviors are also likely to spill over them into other contexts. For instance, people who buy organic food would rather recycle more and use public transit (Thøgersen & Ölander, 2003). Circular consumption encompasses all this set of actions—namely, reusing, reducing, and

recycling (Testa et al., 2020)—yet condenses and distills them into the scale of a single product (Ghisellini et al., 2016; Kirchherr et al., 2017). Put simply, the multifaceted essence of the circular economy takes place in consumers' minds through lifecycle thinking. Coherently, when bearing the lifecycle thinking, consumers would perform circular consumption along all the product lifecycle stages. For this reason, circular consumption enriches traditional green consumption and deserves further investigation.

Therefore, it urges to development of a new behavioral construct that encompasses all those actions. By synthesizing the most acknowledged scales in the literature on environmentally responsible behavior (Hosta & Zabkar, 2020; Roberts, 1995, 1996; Sudbury-Riley & Kohlbacher, 2016), we developed a new definition, which encapsulates and overarches the multidimensionality of circular economy actions and encloses them into one concept: *lifecycle ecologically minded behavior* (LEMB).

H7. PCE positively affects the LEMB.

All the aforementioned hypotheses are summarized in Figure 1.

3 | METHODOLOGY

3.1 | Drawing the coordinates

We utilized a guest base survey to test the frameworks on how IS and its latent antecedents underly environmentally responsible behaviors across the entire product's lifecycle (LEMB) (Jansen et al., 2006). Recognizing that there is a recent debate on quantifying the magnitude of the intention-behavior gap (Hassan et al., 2016), recent empirical studies have demonstrated that this gap is marginal in the purchasing of consumer products (Testa et al., 2019). Also, the social desirability bias due to a survey technique can be minimized by opting for an anonymized and self-administered questionnaire (Cerri et al., 2019).

The sample was drawn from the five largest countries in Europe (i.e., France, Germany, Italy, Spain, and the United Kingdom) to provide more robust evidence (Larson et al., 2015). These are the top five European countries ranked in terms of GDP (World Bank, 2020). According to data from Eurostat, they are also the most populated nations in the European Union (EU-28), accounting for almost 54% of the overall European population. The fair variety of socio-cultural aspects of those within each country and among countries (Kaasa et al., 2014), compared with their magnitude in terms of market size and population, make these countries an excellent context for our research.

The questionnaire was designed based on an extensive review to find the most reliable, acknowledged, validated scales to measure our constructs. Then, a first draft of the questionnaire was shared with seven organizations (namely, research centers and trade associations) that have expertise on green consumption and green products for additional feedback. Finally, we conducted a pre-test with 11 volunteers, at the end of January 2020 on the Italian and English versions. This pre-test generated some improvements to the reliability of the

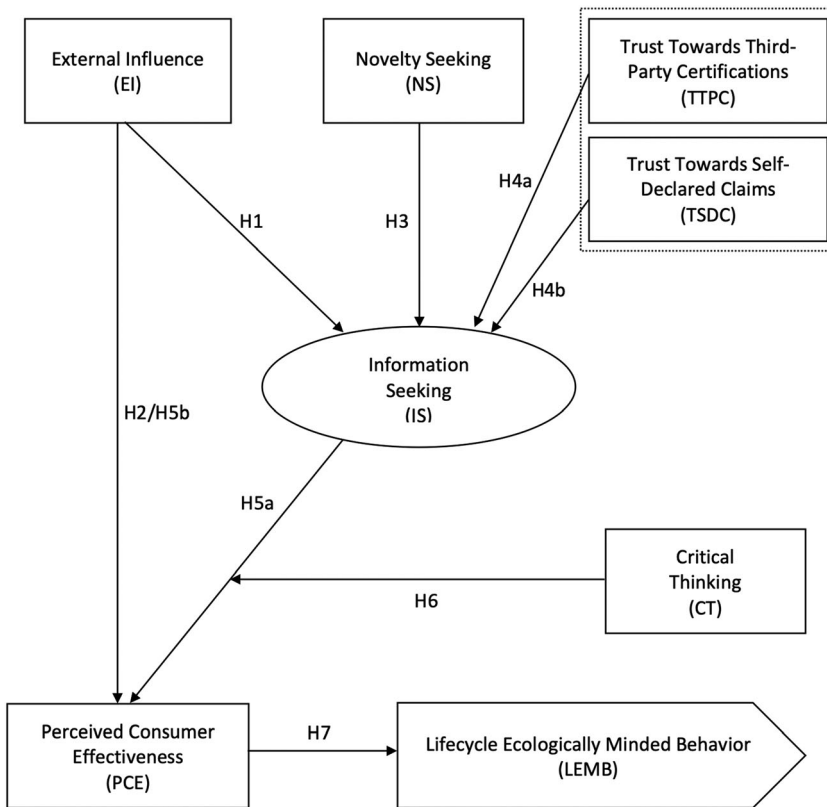


FIGURE 1 The model

survey instrument, boosting the clarity and readability. Then, a professional service provider translated the questionnaire into French, German, and Spanish.

The final questionnaire was administered during the second half of February 2020 to participants belonging to a commercial panel, a representative for the 18–75 years old population of the five countries, from which they had been sampled through stratified random sampling guarantying a 95% interval of confidence and a confidence level of 3.5%. Strata included sex, age, level of education, and geographical area. At the beginning of March 2020, we gathered 4161 usable questionnaires. All the demographics are reported in Table 1.

3.2 | Measurements

We developed the measurement scale for *LEMB* inspired by the scale “Ethically minded consumer behavior” (EMCB) by Sudbury-Riley and Kohlbacher (2016). Since we wanted to address the purchasing and post-purchasing behavior of lifecycle minded consumers about ecological consumption, we adapted two concepts of the original scale—“Ecobuy” and “Recycle”—and enriched them with other behaviors which came out from the focus group. We elaborated an 11-item scale, overarching the entire product lifecycle: starting from purchasing, going through the use phase, up to the final disposal. Respondents were asked to indicate the frequency they do such “lifecycle minded behaviors” from 1 (*never*) to 5 (*always/whenever I have the chance*). Specifically, each construct scored a satisfying Cronbach's alpha (>.8).

All constructs were measured by starting from a deep review of previously validated scales adapted to the study context. *EI* was

measured by five items adapted from a scale from Borhan et al. (2019). *NS* was detected through a four-item scale provided by Hsiao and Yang (2010). *TTPC* was accounted for through a four-item scale by Jiang et al. (2008). To measure *TSDC*, we developed a scale made up of three items, inspired by Taufique et al. (2017). Respondents were also provided with an example of a self-declared claim (i.e., “produced by 100% organic flour”) to better understand the meaning before answering the questions. *IS* was measured by three items provided by Leonidou and Skarmeas (2017). The original items were slightly adapted to better address further informative aspects related to a product's lifecycle (i.e., information related to environmental footprint), information reported on the packaging (e.g., eco-labels, certifications, and ingredient details), or accessed by additional sources (e.g., websites, discussion groups, and friends). *PCE* was measured via three out of four items of the scale proposed by Kang et al. (2013). *CT* was measured by a four-item scale proposed by Menichelli and Braccini (2020). For all the scales described above, we used a Likert's response scale from 1 (*Strongly disagree*) to 6 (*Strongly agree*). All details are reported in Table 2.

4 | RESULT ANALYSIS

4.1 | Assessment of the measurement model

To assess the validity of the latent variables, we carried out a confirmatory factor analysis, evaluating their psychometric properties. All the standardized coefficients were significant and overcame the recommended value of .5 (Anderson & Gerbing, 1988). Hence, we

TABLE 1 Demographics

Demographic variable	Characteristics	Spain		Germany		France		UK		Italy	
		N.	%	N.	%	N.	%	N.	%	N.	%
Gender	Men	413	48.25	412	50.93	395	47.94	392	47.69	410	48.24
	Women	443	51.75	397	49.07	429	52.06	430	52.31	440	51.76
Age class	18–24	85	9.93	89	11	104	12.62	109	13.26	87	10.24
	25–34	143	16.71	150	18.54	150	18.2	167	20.32	134	15.76
	35–44	194	22.66	145	17.92	158	19.17	155	18.86	171	20.12
	45–54	199	23.25	176	21.76	167	20.27	169	20.56	203	23.88
	55–70	235	27.45	249	30.78	245	29.73	222	27.01	255	30
Size of the city	<10k	102	11.92	184	22.74	314	38.11	162	19.71	177	20.82
	10k–30k	151	17.64	154	19.04	165	20.02	197	23.97	181	21.29
	30k–100k	178	20.79	164	20.27	162	19.66	181	22.02	224	26.35
	100k–250k	144	16.82	92	11.37	87	10.56	105	12.77	102	12
	250k–500k	103	12.03	72	8.9	30	3.64	57	6.93	39	4.59
	>500k	178	20.79	143	17.68	66	8.01	120	14.6	127	14.94
Family members	1	57	6.66	211	26.08	123	14.93	148	18	68	8
	2	192	22.43	285	35.23	240	29.13	254	30.9	209	24.59
	3	253	29.56	158	19.53	177	21.48	185	22.51	257	30.24
	4	263	30.72	92	11.37	177	21.48	155	18.86	240	28.24
	5+	91	10.63	63	7.8	107	12.99	80	9.74	76	8.95
Income	Very high	12	1.4	29	3.58	19	2.31	25	3.04	2	0.24
	High	20	2.34	41	5.07	33	4	22	2.68	14	1.65
	Middle-high	133	15.54	136	16.81	114	13.83	86	10.46	100	11.76
	Middle	457	53.39	370	45.74	367	44.54	309	37.59	421	49.53
	Low-middle	169	19.74	139	17.18	167	20.27	216	26.28	204	24
	Low	49	5.72	54	6.67	70	8.5	88	10.71	73	8.59
	Very low	10	1.17	8	0.99	42	5.1	28	3.41	23	2.71
	Not specified	6	0.7	32	3.96	12	1.46	48	5.84	13	1.53
Education	Elementary school or no education	19	2.22	39	4.82	18	2.18	25	3.04	2	0.24
	Middle school	94	10.98	378	46.72	79	9.59	74	9	91	10.71
	High school	293	34.23	206	25.46	392	47.57	362	44.04	487	57.29
	Bachelor's degree	337	39.37	127	15.7	213	25.85	275	33.45	216	25.41
	Master's degree or PhD	113	13.2	59	7.29	122	14.81	86	10.46	54	6.35

evaluated the model fit, considering the chi-square test, the root mean square error of approximation (RMSEA), the Akaike information criterion (AIC), the comparative fit index (CFI), the Tucker–Lewis index (TLI), and the standardized root mean square residual (SRMR), as recommended by Kline (2015) (see Table 3).

We found a statistically significant chi-square result, usually referred to as a “badness of fit.” Nevertheless, the chi-square test is sensitive to sample size, so it almost always gives significant results when large samples are used (Iacobucci, 2010). The other above-mentioned indexes are thus recommended to assess the goodness of fit (Kline, 2015). Regarding the RMSEA, we found a value below .05 as recommended for a good fit. The CFI and the TLI were about .94 and .93, respectively. The AIC of our research model, showed a lower value compared to other models, as expected (Hu & Bentler, 1999). At

last, the SRMR also had an acceptable value since it was below the recommended threshold of .08.

Then, we explored the convergent and discriminant validity for the constructs used in the study. We calculated the average variance extracted (AVE): According to Fornell and Larcker (1981), AVE values of each of the latent constructs should be higher than .5 to support the convergent validity; while to support discriminant validity, constructs' AVE values should also be higher than the highest squared correlation (SC) with any other latent variable. We found no problems either with the convergent validity or the discriminant validity. The construct validity assessment is reported in Table 3.

Even if, as suggested by Podsakoff et al. (2003), in the questionnaire design we adopted several procedural remedies for minimizing the risk of common method variance bias (i.e., clear sentences, no

TABLE 2 Measurements

Constructs	Items	Response scale	Adapted from	Cronbach's alpha
External influence (EI)	<p>I read documents/watched documentaries that claim that buying ecological products (i.e., that have a reduced impact on the environment) is a good way to protect nature.</p> <p>The press presents the purchase of ecological products as a positive thing.</p> <p>The news from the media (TV, radio, internet, etc.) push me to consider the environmental information on the products during my purchases.</p> <p>The word of mouth of family/friends/acquaintances pushes me to look for environmental information on the products during my purchases.</p> <p>On social networks (e.g., Facebook and Twitter), I happen to read news that pushes me to consider the purchase of products that have a reduced impact on the environment.</p>	Likert scale from 1 (<i>Strongly disagree</i>) to 6 (<i>Strongly agree</i>)	Borhan et al. (2019)	.850
Novelty seeking (NS)	<p>I am always looking for new ideas and experiences.</p> <p>When things get boring, I like to explore new and unfamiliar experiences.</p> <p>I like to constantly change my activities.</p> <p>I like to introduce news and changes in my daily routine.</p>	Likert scale from 1 (<i>Strongly disagree</i>) to 6 (<i>Strongly agree</i>)	Hsiao and Yang (2010)	.870
Trust towards third-party certification (TTPC)	<p>I pay much attention to whether a product is certified by third parties.</p> <p>I specifically look for third-party certification symbols.</p> <p>I generally have faith in third-party certification.</p> <p>I generally trust third parties.</p>	Likert scale from 1 (<i>Strongly disagree</i>) to 6 (<i>Strongly agree</i>)	Jiang et al. (2008)	.876
Trust towards self-declared claims (TSDC)	<p>Self-declared claims on products' packaging are genuinely committed to environmental protection.</p> <p>Most of what self-declared claims on products' packaging say about products is reliable.</p> <p>If a self-declared claim makes a claim about a product, that claim is probably true.</p>	Likert scale from 1 (<i>Strongly disagree</i>) to 6 (<i>Strongly agree</i>)	Taufique et al. (2017)	.895

TABLE 2 (Continued)

Constructs	Items	Response scale	Adapted from	Cronbach's alpha
Information seeking (IS)	<p>I would search for more information about product's realization process (e.g., manufacturing, country of origin, ingredients, and environmental footprint)</p> <p>I would seek information about product's realization process from additional sources (e.g., websites, discussion groups, and friends)</p> <p>I would carefully examine all the information about the realization process of the product provided on the packaging (e.g., eco-labels, certifications, and ingredient details)</p>	Likert scale from 1 (<i>Strongly disagree</i>) to 6 (<i>Strongly agree</i>)	Leonidou and Skarmeas (2017)	.859
Perceived consumer effectiveness (PCE)	<p>It is worth, as individual consumer, to make efforts to preserve and improve the environment.</p> <p>Since each individual has an effect upon environmental problems, what I do can make meaningful difference.</p> <p>By purchasing products made in an environmentally friendly way, each consumer's behavior can have a positive effect on the environment and society.</p>	Likert scale from 1 (<i>Strongly disagree</i>) to 6 (<i>Strongly agree</i>)	Kang et al. (2013)	.883
Critical thinking (CT)	<p>I am used to select information sources and to judge their relevance.</p> <p>It is easy for me to identify and avoid unreliable information sources.</p> <p>I never fall into the trap of considering as reliable an unreliable information source.</p> <p>I think to be capable of assessing the reliability of information sources.</p>	Likert scale from 1 (<i>Strongly disagree</i>) to 6 (<i>Strongly agree</i>)	Menichelli and Braccini (2020)	.844
Lifecycle ecologically minded behavior (LEMB)	<p>When I buy soap for personal care, I choose the one with low environmental impact.</p> <p>When I buy a laundry detergent, I choose with low environmental impact.</p> <p>When I buy paper products I always choose recycled ones.</p> <p>When I buy groceries, I choose food with a low environmental impact.</p> <p>When I buy vegetables, I look for local produced ones.</p> <p>When I buy biscuits or similar products I choose the ones with recyclable packaging.</p> <p>When I buy bottled beverages, I look for recycled packaging.</p>	5-point frequency scale (1: <i>Never</i> , 2: <i>Rarely</i> , 3: <i>Sometimes</i> , 4: <i>Often</i> , 5: <i>Always/whenever I have the chance</i>)	Sudbury-Riley and Kohlbacher (2016)	.923

(Continues)

TABLE 2 (Continued)

Constructs	Items	Response scale	Adapted from	Cronbach's alpha
	When buying food, I carefully evaluate the amount I need to avoid waste.			
	When I use a shampoo, I use just the necessary amount avoiding waste.			
	When I finish a packaged food product, I try to reuse the packaging if possible.			
	When I finish a packaged food product, I carefully separate the packaging for recycling.			

TABLE 3 Construct validity assessment

Latent variables	Squared correlations (SCs) among latent variables								AVE
	EI	NS	IS	CT	TTPC	TSDC	PCE	LEMB	
External influence (EI)	1								.540
Novelty seeking (NS)	.318	1							.628
Information seeking (IS)	.503	.356	1						.672
Critical thinking (CT)	.301	.220	.246	1					.581
Trust towards third-party certification (TTPC)	.486	.229	.378	.214	1				.641
Trust towards self-declared Claims (TSDC)	.400	.194	.255	.179	.453	1			.741
Perceived consumer effectiveness (PCE)	.460	.160	.305	.214	.217	.204	1		.717
Lifecycle ecologically minded behavior (LEMB)	.388	.179	.358	.183	.322	.205	.338	1	.510

Note: When AVE values \geq SC values, there is no problem with discriminant validity; when AVE values \geq .5, there is no problem with the convergent validity.

ambiguous term or complex concepts, and anonymity) after the data had been gathered, we controlled the presence of common method bias. First, we carried out the Harman's single-factor test to verify whether a single factor accounted for the majority of variance (Podsakoff & Organ, 1986) to control for (CMB). Even though this test has received some criticism because it can generate false positives, this happens when the constructs are characterized by high reliability (i.e., Cronbach's alpha higher than .95) (Fuller et al., 2016). Concern about biases was allayed somewhat since Cronbach's alpha values were lower than the threshold, and the largest factor accounted for approximately 36% of the variance. Second, as suggested by Bagozzi et al. (1991), we assessed the correlation among latent variables; since the correlation among principal constructs is less than .9 (it varies from .37 to .60), we can affirm that common method variance is not an issue.

Finally, before testing the hypotheses, we compared our research model to other competing ones to check the presence of nested models having a better fit (James et al., 2006). In Table 4, the fit indexes of our research model are shown compared with four alternative models. The findings described so far allowed us to retain our model.

4.2 | Testing hypotheses

After assessing the goodness-of-fit indexes, we tested the research hypotheses describing the causal relations among the constructs included in the structural equation model.

Results showed that EI has a positive and significant impact on IS ($\beta = .445$; $p < .001$). Hence, H1 was supported. The EI was found to also have a significant effect on PCE ($\beta = .602$; $p < .001$), supporting H2 as well. Even H3 was supported since the consumer's longing for novelty (NS) showed a positive influence on IS ($\beta = .266$; $p < .001$).

Results showed an interesting and unexpected effect of consumers' TTPC on IS. In particular, the higher the consumers' TTPC, the higher their willingness to seek additional information. This does not support H4a ($\beta = .193$; $p < .001$). So the consumer's trust towards certification does not inhibit the research of additional information from other sources: On the contrary, it seems to act positively. Instead, the TSDC appeared to have no significant influence on IS; hence, H4b was not supported.

Findings also showed that IS positively affected the PCE ($\beta = .154$; $p < .001$), and PCE strongly influenced LEMB ($\beta = .624$; $p < .001$), thus supporting H5a and H7.

TABLE 4 Results of fit statistics and models comparison

Models	Paths	Likelihood ratio (χ^2)	Degrees of freedom	RMSEA	AIC	CFI	TLI
Our research model	(EI NS TTPC TSDC → IS) (EI IS → PCE) (PCE → LEMB)	6667.467	612	.049	396,402.601	.936	.930
Alternative Model 1	(EI NS TTPC TSDC → IS) (IS → PCE) (PCE → LEMB)	7335.015	613	.051	397,068.148	.929	.923
Alternative Model 2	(EI → NS) (EI NS TTPC TSDC → IS) (IS → PCE) (PCE → LEMB)	7502.656	616	.052	397,229.790	.927	.921
Alternative Model 3	(EI → TTPC) (EI → TSDC) (EI NS TTPC TSDC → IS) (IS → PCE) (PCE → LEMB)	7800.182	618	.053	397,523.316	.924	.918
Alternative Model 4	(EI NS TTPC TSDC → IS) (IS → PCE) (EI PCE → LEMB)	6698.949	612	.049	396,434.083	.935	.930

Abbreviations: EI, external influence; IS, information seeking; LEMB, lifecycle ecologically minded behavior; NS, novelty seeking; PCE, perceived consumer effectiveness; TSDC, trust towards self-declared claims; TTPC, trust towards third-party certification.

TABLE 5 Results of the structural equation model

Paths	Coef.	SE	z	P > z	[95% Conf. interval]	
IS ←						
EI	.445	.023	19.59	.000	0.401	0.490
NS	.266	.017	15.92	.000	0.234	0.299
TTPC	.193	.023	8.48	.000	0.148	0.237
TSDC	-.025	.020	-1.23	.218	-0.065	0.0148
PCE ←						
IS	.154	.022	6.93	.000	0.111	0.198
EI	.602	.021	29.21	.000	0.562	0.643
LEMB ←						
PCE	.624	.011	55.95	.000	0.602	0.646

Abbreviations: EI, external influence; IS, information seeking; LEMB, lifecycle ecologically minded behavior; NS, novelty seeking; PCE, perceived consumer effectiveness; TSDC, trust towards self-declared claims; TTPC, trust towards third-party certification.

The results described above are reported in Table 5.

To test the mediation hypothesized in H5b, we assessed the direct and indirect effects of EI on PCE by performing the bias-corrected bootstrap method with $n = 5000$ bootstrap resamples since it provides more statistical power (Cheung & Lau, 2007). We calculated that IS as the mediator between EI and PCE, accounted for 10.25% of the variance (indirect effect/total effect = 0.070/0.684). The standardized direct effect of EI on PCE was 0.614 while the standardized indirect effect through IS was 0.070. The ratio of indirect to direct effect was 0.114, whereas the ratio of total to direct effect was 1.11. To sum up, the total effect of the EI on individuals' perceived effectiveness was partially mediated through the personal predisposition to acquire further environmental information. Therefore, H5b was supported.

Since regression procedures are preferred when predictor and moderator variables are continuous (Frazier et al., 2004), hierarchical regression was performed to test our moderation hypotheses H6. The first model contains only the control variables (country, gender, and

TABLE 6 Summary of hypotheses and results

Hypotheses	Results
H1: External influence has a positive impact on consumer's information seeking.	Supported
H2: External influence has a positive impact on perceived consumer effectiveness (PCE).	Supported
H3: Novelty seeking has a positive impact on information seeking.	Supported
H4a: Trust towards third-party certification inhibits information seeking.	Inversely Supported
H4b: Trust towards self-declared claims inhibits information seeking.	Not supported
H5a: Information seeking positively influences PCE.	Supported
H5b: Information seeking mediates the impact of external influence on PCE.	Supported
H6: Critical thinking moderates the relation between information seeking and perceived consumer effectiveness.	Not supported
H7: Perceived consumer effectiveness positively affects the lifecycle ecologically minded behavior (LEMB).	Supported

age), the second model includes also the predictor and moderator variables (CT and IS) whereas the third model includes the product terms representing the interaction between predictor and moderator variable. In all models, the F test is statistically significant, and the explanatory variables add a relevant amount of explained variance except for Model 3, where the amount of explained variance does not significantly vary. Moreover, the coefficient of product term is negative ($\beta = -.012$) but not statistically significant, therefore we reject H6.

All the hypotheses and results are summarized in Table 6.

5 | DISCUSSION

Can sustainability information stimulate heightened curiosity and encourage consumers to become willing and active participants in the

circular economy? We demonstrated so. We specifically contend that contextual information on the circular economy might encourage customers to look for more information, support their perception of the effectiveness of their environmental impact, and ultimately improve the likelihood that they will make a purchase. Thus, we demonstrate that the circular economy context may not fully support White and colleagues' hypotheses. According to this general perspective, we also seek to determine whether lifecycle thinking might help people expand their understanding of the concept of circular consumption (Patwa et al., 2021).

Our study departs from White et al.'s (2019) definition of IS, according to which the influence of contextual information on further IS should be minimal, if it exists at all. In certain ways, we go beyond and diverge from White et al.'s (2019) notion of IS. Interestingly, IS is fostered by "green" clues (EI) and personal motivations (NS) and legitimated by trust (specifically, TTPC). Notably, we confirm that IS is a valuable parameter to bridge the gap between attitude, intention, and behavior; conversely to the extant literature (Carrington et al., 2010; Hassan et al., 2016; Hiller & Woodall, 2019; White et al., 2019), we suggest refining the axiomatic assumption that *the more information, the better*, and moreover, the *more information search, the better*.

At first, as predicted, IS is boosted by personal curiosity and willingness to be up-to-date (i.e., NS). Unexpectedly, though, emotional attitude (i.e., trust) does not inhibit consumers' IS. Trust in self-declaration does not discourage the search for information; trust in third-party certification, by contrast, stimulates people to check further information. Therefore, we can assert that seeking for information (i.e., scrolling news on green products, forwarding likes on environmentally committed posts, and sharing comments on that with other people) is boosted by personal seeking for novelty and, as well as from EI.

A specific consideration concerns the impact of "green" clues (i.e., EI) on IS. Whether it has been proved that media coverage on green consumption influences people's beliefs (El Ghouli et al., 2019; Hoelscher & Chatzidakis, 2021; Huang, 2016; Thøgersen, 2006), the literature has overlooked the fact that people inquire about "green" clues they are exposed to throughout their own social networks (online and offline). Information search, then, can be biased by filter bubble and echo chamber effects (Bruns, 2019). Hence, the suspicion of this bias is prompted by the inefficacy of CT in moderating the effect of IS on PCE. Therefore, we reserved a further reflection on this point in the paragraph dedicated to further research.

Ultimately, our findings demonstrate that IS and EI do influence PCE and impact LEMB. Coherently with previous research (Hosta & Zabkar, 2020; Kim & Choi, 2005; Roberts, 1996; Vermeir & Verbeke, 2008), PCE confirms to be a reliable behavioral predictor ($\beta = .624$; $p < .001$). Moreover, we pose an emphasis on the internal consistency of LEMB (Cronbach's alpha = .923) to shed light on the coherence among purchase, use, and post-consumption behavior. It shows that the extended set of environmentally responsible behaviors—promoted by the circular economy—must henceforth be encapsulated into a single, yet multifaceted set of behaviors.

6 | CONCLUSION

6.1 | Main findings

This study aims to expand the comprehension of behavior changes towards eco-friendlier behaviors; therefore, this research depicts a conceptual model hinged on the importance of IS in building self-efficacy in the circular economy domain.

Our conceptual model explains the mechanism through which people actively acquire information to make judgments about their ability to behave in an environmentally responsible way. Also, this research tests an extended conceptualization of environmentally responsible behaviors in the light of the burgeoning circular economy tenets, which includes a broader set of actions, beyond the mere purchasing step, (like shopping only the necessary number of items, using only the necessary quantity of product, separating garbage, or reusing packaging). The set of actions encapsulated in the new concept of LEMB accomplishes the monolithic yet kaleidoscopic nature of the circular economy paradigm (Geissdoerfer et al., 2017).

6.2 | Theoretical and practical implications

Our results contribute to the current theoretical debate on the role of information in prompting sustainable consumption (Hassan et al., 2016; Hosta & Zabkar, 2020; White et al., 2019). Our study demonstrates that IS stems not only from the personal attitude but also from a combination of personal beliefs and interactions with the external environment. Moreover, our model clarifies how information search about green products, primarily, can be empowering to people to contribute to the circular economy. Also, we aim at describing the vastness and multifaceted nature of the circular economy, which translates into circular consumption when it comes to the consumers' point of view (Carrington et al., 2010; Hosta & Zabkar, 2020; Kim & Choi, 2005; Roberts, 1996; Sudbury-Riley & Kohlbacher, 2016).

The analysis of our findings provides diverse implications for business practitioners. First, managers shall recognize the importance of providing valuable information on green product attributes. The role of eco-labels may be pivotal (Castka & Corbett, 2016; Testa et al., 2015), but the company shall pay attention to how the information is perceived and understood by the consumer. The proliferation of eco-labels mainly based on technical or generic information can increase distrust in consumers and, therefore, reduce PCE. Designing robust and clear green claims—supported by additional information—can satisfy the consumers' need of being informed. The use of digital solutions like QR codes provides managers with a smart tool that facilitates consumers' information screening.

Furthermore, policy implications stem from our research. Policy interventions are needed to regulate the use of the information linked to green products and avoid vague and unclear information that is potentially misleading and reduces consumers' trust. Metrics based on lifecycle logic like the International Life Cycle Assessment or the European Product Environmental Footprint can represent robust

methodologies for producing reliable information. The idea of the European Commission, as emerged in the recent Circular Economy Action Plan, to link green claims to LCA methodologies may represent an effective policy intervention able to make the green market more transparent, reducing greenwashing and encountering consumers' needs.

6.3 | Limitations and further research avenues

This research, however, is not free from limitations, which can draw avenues for further research. By triangulating EI, IS, and PCE, we can glimpse a “filter bubble” which might denote an “echo chamber” effect (Bruns, 2019). Specifically, our model explains that when exposed to commercials promoting environmentally responsible behavior according to the circular economy narrative, like “Complete the cycle, embrace recycle,” people react by devoting an extra effort which consists in scrolling further news or commenting with their closest peers (IS); the information acquired by that further effort builds people's perceived effectiveness (PCE) in being able to make an impact in the real life. However, the effect of IS on PCE is not moderated by critical thinking (CT), probably because people are looking into their own “filter bubble” (Bruns, 2019). In other words, people's judgments about their ability to do something for the environment are forged by their extra effort in seeking information rather than a critical screening of the information ex-post. Hence, this logical pathway can be biased by an a priori “self-confirmation bias” in IS (Roetzel, 2019; Tversky & Kahneman, 1974), because the information comes from an ex-ante customized source of information (i.e., filter bubble). That deserves further investigation.

Furthermore, by demonstrating that “green” clues can both foster self-efficacy (PCE) and spark further inquisitiveness (IS) alike, this study can pave the way to new—although embryonic—arguments for investigating the role of contrasts, dilemmas, and paradoxes in people's in the debate about attitude–behavior gaps in sustainable consumption realm (Waldman et al., 2019).

Finally, although our model has been tested across five large countries in Europe, testing it over context with different socio-cultural parameters can enhance the reliability of the conceptual model.

ACKNOWLEDGEMENTS

Open Access Funding provided by Scuola Superiore Sant'Anna within the CRUI-CARE Agreement.

CONFLICT OF INTEREST

No financial and personal relationships with other people or organizations that could inappropriately influence (bias) our work has to be declared.

AUTHOR CONTRIBUTIONS

Vinicio Di Iorio conceptualized the study, performed the investigation, and wrote the original draft of the manuscript. Francesco Testa

administered the project, designed the methodology, and provided the resources. Daniel Korschun reviewed and edited the manuscript. Fabio Iraldo supervised the study and acquired the funding. Roberta Iovino curated the data and prepared the software.

ORCID

Vinicio Di Iorio  <https://orcid.org/0000-0002-1242-2767>

Roberta Iovino  <https://orcid.org/0000-0002-0343-4942>

REFERENCES

- Adams, S., & Van Allen, P. (2010). B Corporation: A new sustainable business model. 1–10.
- Akerlof, G. A. (2009). The market for “lemons”: Quality uncertainty and the market mechanism. In *An economic theorist's book of tales* (pp. 7–22). Cambridge University Press. <https://doi.org/10.1017/cbo9780511609381.002>
- Alonso-Almeida, M., Rodríguez-Antón, J. M., Bagur-Femenías, L., & Perramon, J. (2020). Sustainable development and circular economy: The role of institutional promotion on circular consumption and market competitiveness from a multistakeholder engagement approach. *Business Strategy and the Environment*, 29(6), 2803–2814. <https://doi.org/10.1002/bse.2544>
- Alter, C., Haynes, S., Worland, J., & Arbugaeva, E. (2019). Greta Thunberg. *Time*. <https://doi.org/10.1002/chemv.201900137>
- Anderson, J. C., & Gerbing, D. W. (1988). Structural Equation Modeling in Practice: A Review and Recommended Two-Step Approach. *Psychological Bulletin*, 103(3), 411–423. <https://doi.org/10.1037/0033-2909.103.3.411>
- Atkinson, L., & Rosenthal, S. (2014). Signaling the green sell: The influence of eco-label source, argument specificity, and product involvement on consumer trust. *Journal of Advertising*, 43(1), 33–45. <https://doi.org/10.1080/00913367.2013.834803>
- Bagozzi, R. P., Yi, Y., & Phillips, L. W. (1991). Assessing construct validity in organizational research. *Administrative Science Quarterly*, 36(3), 421–458. <https://doi.org/10.2307/2393203>
- Bansal, P., & Clelland, I. (2004). Talking trash: Legitimacy, impression management, and unsystematic risk in the context of the natural environment. *Academy of Management Journal*, 47(1), 93–103. <https://doi.org/10.5465/20159562>
- Blake, J. (1999). Overcoming the ‘value-action gap’ in environmental policy: Tensions between national policy and local experience. *Local Environment*, 4(3), 257–278. <https://doi.org/10.1080/13549839908725599>
- Boesen, S., Bey, N., & Niero, M. (2019). Environmental sustainability of liquid food packaging: Is there a gap between Danish consumers' perception and learnings from life cycle assessment? *Journal of Cleaner Production*, 210, 1193–1206. <https://doi.org/10.1016/j.jclepro.2018.11.055>
- Borhan, M. N., Ibrahim, A. N. H., & Miskeen, M. A. A. (2019). Extending the theory of planned behaviour to predict the intention to take the new high-speed rail for intercity travel in Libya: Assessment of the influence of novelty seeking, trust and external influence. *Transportation Research Part A: Policy and Practice*, 130(September), 373–384. <https://doi.org/10.1016/j.tra.2019.09.058>
- Borhan, M. N., Ibrahim, A. N. H., Miskeen, M. A. A., Rahmat, R. A. O. K., & Alhodairi, A. M. (2017). Predicting car drivers' intention to use low cost airlines for intercity travel in Libya. *Journal of Air Transport Management*, 65, 88–98. <https://doi.org/10.1016/j.jairtraman.2017.09.004>
- Borrello, M., Caracciolo, F., Lombardi, A., Pascucci, S., & Cembalo, L. (2017). Consumers' perspective on circular economy strategy for reducing food waste. *Sustainability*, 9(1), 141. <https://doi.org/10.3390/su9010141>

- Braman, D., Kahan, D. M., Peters, E., Wittlin, M., Slovic, P., Ouellette, L. L., & Mandel, G. N. (2012). The polarizing impact of science literacy and numeracy on perceived climate change risks. *Nature Climate Change*, 2(10), 732–735.
- Bray, J., Johns, N., & Kilburn, D. (2011). An exploratory study into the factors impeding ethical consumption. *Journal of Business Ethics*, 98(4), 597–608. <https://doi.org/10.1007/s10551-010-0640-9>
- Bruns, A. (2019). Filter bubble. *Internet Policy Review*, 8(4), 1–14. <https://doi.org/10.14763/2019.4.1426>
- Carfora, V., Cavallo, C., Caso, D., del Giudice, T., de Devitiis, B., Viscecchia, R., Nardone, G., & Cicia, G. (2019). Explaining consumer purchase behavior for organic milk: Including trust and green self-identity within the theory of planned behavior. *Food Quality and Preference*, 76(September 2018), 1–9. <https://doi.org/10.1016/j.foodqual.2019.03.006>
- Carrington, M. J., Neville, B. A., & Whitwell, G. J. (2010). Why ethical consumers don't walk their talk: Towards a framework for understanding the gap between the ethical purchase intentions and actual buying behaviour of ethically minded consumers. *Journal of Business Ethics*, 97(1), 139–158. <https://doi.org/10.1007/s10551-010-0501-6>
- Castka, P., & Corbett, C. J. (2016). Governance of eco-labels: Expert opinion and media coverage. *Journal of Business Ethics*, 135(2), 309–326. <https://doi.org/10.1007/s10551-014-2474-3>
- Cerri, J., Testa, F., Rizzi, F., & Frey, M. (2019). Factorial surveys reveal social desirability bias over self-reported organic fruit consumption. *British Food Journal*, 121(4), 897–909. <https://doi.org/10.1108/BFJ-04-2018-0238>
- Chen, Y., Ghosh, M., Liu, Y., & Zhao, L. (2019). Media coverage of climate change and sustainable product consumption: Evidence from the hybrid vehicle market. *Journal of Marketing Research*, 56(6), 995–1011. <https://doi.org/10.1177/0022243719865898>
- Chen, Y.-S., & Chang, C.-H. (2013). Greenwash and green trust: The mediation effects of green consumer confusion and green perceived risk. *Journal of Business Ethics*, 114(3), 489–500.
- Cheung, G. W., & Lau, R. S. (2007). Testing mediation and suppression effects of latent variables: Bootstrapping with structural equation models. *Organizational Research Methods*, 11(2), 296–325. <https://doi.org/10.1177/1094428107300343>
- Choo, C. W. (2007). Information seeking in organizations: Epistemic contexts and contests. *Information Research*, 12(2), 1–15.
- Correia, A., Pimpao, A., & Crouch, G. (2008). Perceived risk and novelty-seeking behavior: The case of tourists on low-cost travel in Algarve (Portugal). In *Advances in culture, tourism and hospitality research* (Vol. 2, pp. 1–26). Emerald Group Publishing Limited.
- Currie, R. (1997). A pleasure-tourism behaviors framework. *Annals of Tourism Research*, 24(4), 884–897.
- Darnall, N., Ji, H., & Vázquez-Brust, D. A. (2018). Third-party certification, sponsorship, and consumers' ecolabel use. *Journal of Business Ethics*, 150(4), 953–969. <https://doi.org/10.1007/s10551-016-3138-2>
- El Ghouli, S., Guedhami, O., Nash, R., & Patel, A. (2019). New evidence on the role of the media in corporate social responsibility. *Journal of Business Ethics*, 154(4), 1051–1079. <https://doi.org/10.1007/s10551-016-3354-9>
- Ellen Macarthur Foundation. (2013). *Circular economy overview*. Ellen Macarthur Foundation.
- Farooq, O., Rupp, D. E., & Farooq, M. (2017). The multiple pathways through which internal and external corporate social responsibility influence organizational identification and multifoci outcomes: The moderating role of cultural and social orientations. *Academy of Management Journal*, 60(3), 954–985.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39–50. <https://doi.org/10.1177/002224378101800104>
- Frazier, P. A., Tix, A. P., & Barron, K. E. (2004). Testing moderator and mediator effects in counseling psychology research. *Journal of Counseling Psychology*, 51(1), 115–134. <https://doi.org/10.1037/0022-0167.51.1.115>
- Fuller, C. M., Simmering, M. J., Atinc, G., Atinc, Y., & Babin, B. J. (2016). Common methods variance detection in business research. *Journal of Business Research*, 69(8), 3192–3198. <https://doi.org/10.1016/j.jbusres.2015.12.008>
- Geissdoerfer, M., Savaget, P., Bocken, N. M. P., & Jan, E. (2017). The circular economy—A new sustainability paradigm? *Journal of Cleaner Production*, 143, 757–768. <https://doi.org/10.1016/j.jclepro.2016.12.048>
- Ghisellini, P., Cialani, C., & Ulgiati, S. (2016). A review on circular economy: The expected transition to a balanced interplay of environmental and economic systems. *Journal of Cleaner Production*, 114, 11–32. <https://doi.org/10.1016/j.jclepro.2015.09.007>
- Gigerenzer, G., & Gaissmaier, W. (2011). Heuristic decision making. *Annual Review of Psychology*, 62(1), 451–482. <https://doi.org/10.1146/annurev-psych-120709-145346>
- Gong, Y., Putnam, E., You, W., & Zhao, C. (2020). Investigation into circular economy of plastics: The case of the UK fast moving consumer goods industry. *Journal of Cleaner Production*, 244, 118941. <https://doi.org/10.1016/j.jclepro.2019.118941>
- Greenpeace International. (2018). A crisis of convenience: The corporations behind the plastics pollution pandemic.
- Hargittai, E., & Hinnant, A. (2008). Digital inequality: Differences in young adults' use of the Internet. *Communication Research*, 35(5), 602–621. <https://doi.org/10.1177/0093650208321782>
- Harring, N., Jagers, S. C., & Nilsson, F. (2019). Recycling as a large-scale collective action dilemma: A cross-country study on trust and reported recycling behavior. *Resources, Conservation and Recycling*, 140, 85–90. <https://doi.org/10.1016/j.resconrec.2018.09.008>
- Hassan, L. M., Shiu, E., & Shaw, D. (2016). Who says there is an intention-behaviour gap? Assessing the empirical evidence of an intention-behaviour gap in ethical consumption. *Journal of Business Ethics*, 136(2), 219–236. <https://doi.org/10.1007/s10551-014-2440-0>
- Hiller, A., & Woodall, T. (2019). Everything flows: A pragmatist perspective of trade-offs and value in ethical consumption. *Journal of Business Ethics*, 157(4), 893–912. <https://doi.org/10.1007/s10551-018-3956-5>
- Hirschman, E. C. (1980). Innovativeness, novelty seeking, and consumer creativity. *Journal of Consumer Research*, 7(3), 283–295.
- Hoelscher, V., & Chatzidakis, A. (2021). Ethical consumption communities across physical and digital spaces: An exploration of their complementary and synergistic affordances. *Journal of Business Ethics*, 172, 291–306. <https://doi.org/10.1007/s10551-020-04477-6>
- Horne, R. E. (2009). Limits to labels: The role of eco-labels in the assessment of product sustainability and routes to sustainable consumption. *International Journal of Consumer Studies*, 33(2), 175–182.
- Hosta, M., & Zabkar, V. (2020). Antecedents of environmentally and socially responsible sustainable consumer behavior. *Journal of Business Ethics*, 171, 273–293. <https://doi.org/10.1007/s10551-019-04416-0>
- Hsiao, C. H., & Yang, C. (2010). Predicting the travel intention to take High Speed Rail among college students. *Transportation Research Part F: Traffic Psychology and Behaviour*, 13(4), 277–287. <https://doi.org/10.1016/j.trf.2010.04.011>
- Hu, L. T., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6(1), 1–55. <https://doi.org/10.1080/10705519909540118>
- Huang, H. (2016). Media use, environmental beliefs, self-efficacy, and pro-environmental behavior. *Journal of Business Research*, 69(6), 2206–2212. <https://doi.org/10.1016/j.jbusres.2015.12.031>

- Iacobucci, D. (2010). Structural equations modeling: Fit indices, sample size, and advanced topics. *Journal of Consumer Psychology*, 20, 90–98. <https://doi.org/10.1016/j.jcps.2009.09.003>
- James, L. R., Mulaik, S. A., & Brett, J. M. (2006). A tale of two methods. *Organizational Research Methods*, 9(2), 233–244. <https://doi.org/10.1177/1094428105285144>
- Jang, S., & Feng, R. (2007). Temporal destination revisit intention: The effects of novelty seeking and satisfaction. *Tourism Management*, 28(2), 580–590. <https://doi.org/10.1016/j.tourman.2006.04.024>
- Jansen, K. J., Corley, K. G., & Jansen, B. J. (2006). E-survey methodology. In *Handbook of research on electronic surveys and measurements* (pp. 1–8). IGI Global. <https://doi.org/10.4018/978-1-59140-792-8.ch001>
- Jiang, P., Jones, D. B., & Javie, S. (2008). How third-party certification programs relate to consumer trust in online transactions: An exploratory study. *Psychology & Marketing*, 25(9), 839–858. <https://doi.org/10.1002/mar.20243>
- Kaasa, A., Vadi, M., & Varblane, U. (2014). Regional cultural differences within European countries: Evidence from multi-country surveys. *Management International Review*, 54(6), 825–852. <https://doi.org/10.1007/s11575-014-0223-6>
- Kahneman, D. (2011). *Thinking, fast and slow*. Penguin Books.
- Kang, J., Liu, C., & Kim, S. H. (2013). Environmentally sustainable textile and apparel consumption: The role of consumer knowledge, perceived consumer effectiveness and perceived personal relevance. *International Journal of Consumer Studies*, 37(4), 442–452. <https://doi.org/10.1111/ijcs.12013>
- Khan, F., Ahmed, W., & Najmi, A. (2019). Understanding consumers' behavior intentions towards dealing with the plastic waste: Perspective of a developing country. *Resources, Conservation and Recycling*, 142, 49–58. <https://doi.org/10.1016/j.resconrec.2018.11.020>
- Kim, Y., & Choi, S. M. (2005). *Antecedents of green purchase behavior: An examination of collectivism, environmental concern, and PCE* (Vol. 32). Advances in Consumer Research. (pp. 592–599). Association for Consumer Research. Retrieved from <http://www.acrwebsite.org/volumes/9156/volumes/v32/NA-32>; <http://www.copyright.com/>
- Kirchherr, J., Reike, D., & Hekkert, M. (2017). Conceptualizing the circular economy: An analysis of 114 definitions. *Resources, Conservation and Recycling*, 127(September), 221–232. <https://doi.org/10.1016/j.resconrec.2017.09.005>
- Kline, R. B. (2015). *Principles and practice of structural equation modeling*. Guilford Publications.
- Larson, L. R., Stedman, R. C., Cooper, C. B., & Decker, D. J. (2015). Understanding the multi-dimensional structure of pro-environmental behavior. *Journal of Environmental Psychology*, 43, 112–124. <https://doi.org/10.1016/j.jenvp.2015.06.004>
- Leonidou, C. N., & Skarmeas, D. (2017). Gray shades of green: Causes and consequences of green skepticism. *Journal of Business Ethics*, 144(2), 401–415. <https://doi.org/10.1007/s10551-015-2829-4>
- Leyden, D. P. (2011). *Critical thinking in economics*. Kona Publishing and Media Group.
- Marchionini, G. (1992). Interfaces for end-user information seeking. *Journal of the American Society for Information Science*, 43(2), 156–163. [https://doi.org/10.1002/\(SICI\)1097-4571\(199203\)43:2](https://doi.org/10.1002/(SICI)1097-4571(199203)43:2)
- Menichelli, M., & Braccini, A. M. (2020). Millennials, information assessment, and social media: An exploratory study on the assessment of critical thinking habits. In A. Lazazzara, F. Ricciardi, & S. Za (Eds.), *Exploring digital ecosystems* (pp. 85–97). Springer International Publishing. https://doi.org/10.1007/978-3-030-23665-6_7
- Mitchell, R. K., Van Buren, H. J., Greenwood, M., & Freeman, R. E. (2015). Stakeholder inclusion and accounting for stakeholders. *Journal of Management Studies*, 52(7), 851–877. <https://doi.org/10.1111/joms.12151>
- Moktadir, M. A., Kumar, A., Ali, S. M., Paul, S. K., Sultana, R., & Rezaei, J. (2020). Critical success factors for a circular economy: Implications for business strategy and the environment. *Business Strategy and the Environment*, 29(8), 3611–3635. <https://doi.org/10.1002/bse.2600>
- Moon, S. J., Costello, J. P., & Koo, D. M. (2017). The impact of consumer confusion from eco-labels on negative WOM, distrust, and dissatisfaction. *International Journal of Advertising*, 36(2), 246–271. <https://doi.org/10.1080/02650487.2016.1158223>
- Murray, A., Skene, K., & Haynes, K. (2017). The circular economy: An interdisciplinary exploration of the concept and application in a global context. *Journal of Business Ethics*, 140(3), 369–380. <https://doi.org/10.1007/s10551-015-2693-2>
- Neumann, B. R., Roberts, M. L., & Cauvin, E. (2012). Management control systems dilemma: Reconciling sustainability with information overload. In M. J. Epstein & J. Y. Lee (Eds.), *Advances in Management Accounting* (pp. 1–28). Emerald Group.
- Nyilasy, G., Gangadharbatla, H., & Paladino, A. (2014). Perceived greenwashing: The interactive effects of green advertising and corporate environmental performance on consumer reactions. *Journal of Business Ethics*, 125(4), 693–707. <https://doi.org/10.1007/s10551-013-1944-3>
- Parajuly, K., Fitzpatrick, C., Muldoon, O., & Kuehr, R. (2020). Behavioral change for the circular economy: A review with focus on electronic waste management in the EU. *Resources, Conservation and Recycling: X*, 6(August 2019), 100035. <https://doi.org/10.1016/j.rcrx.2020.100035>
- Patwa, N., Sivarajah, U., Seetharaman, A., Sarkar, S., Maiti, K., & Hingorani, K. (2021). Towards a circular economy: An emerging economies context. *Journal of Business Research*, 122(September 2019), 725–735. <https://doi.org/10.1016/j.jbusres.2020.05.015>
- Perey, R., Benn, S., Agarwal, R., & Edwards, M. (2018). The place of waste: Changing business value for the circular economy. *Business Strategy and the Environment*, 27(5), 631–642. <https://doi.org/10.1002/bse.2068>
- Perrini, F., Castaldo, S., Misani, N., & Tencati, A. (2010). The impact of corporate social responsibility associations on trust in organic products marketed by mainstream retailers: A study of Italian consumers. *Business Strategy and the Environment*, 19(8), 512–526. <https://doi.org/10.1002/bse.660>
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879–903. <https://doi.org/10.1037/0021-9010.88.5.879>
- Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management*, 12(4), 531–544. <https://doi.org/10.1177/014920638601200408>
- Polonsky, M. J., Vocino, A., Grau, S. L., Garma, R., & Ferdous, A. S. (2012). The impact of general and carbon-related environmental knowledge on attitudes and behaviour of US consumers. *Journal of Marketing Management*, 28(3–4), 238–263. <https://doi.org/10.1080/0267257X.2012.659279>
- Reeskens, T., & Hooghe, M. (2008). Cross-cultural measurement equivalence of generalized trust. Evidence from the European Social Survey (2002 and 2004). *Social Indicators Research*, 85(3), 515–532. <https://doi.org/10.1007/s11205-007-9100-z>
- Roberts, J. A. (1995). Profiling levels of socially responsible consumer behavior: A cluster analytic approach and its implications for marketing. *Journal of Marketing Theory and Practice*, 3(4), 97–117. <https://doi.org/10.1080/10696679.1995.11501709>
- Roberts, J. A. (1996). Green consumers in the 1990s: Profile and implications for advertising. *Journal of Business Research*, 36(3), 217–231. [https://doi.org/10.1016/0148-2963\(95\)00150-6](https://doi.org/10.1016/0148-2963(95)00150-6)
- Roetzel, P. G. (2019). Information overload in the information age: A review of the literature from business administration, business psychology, and related disciplines with a bibliometric approach and framework development. *Business Research*, 12(2), 479–522. <https://doi.org/10.1007/s40685-018-0069-z>
- Saphores, J.-D. M., & Nixon, H. (2014). How effective are current household recycling policies? Results from a national survey of

- U.S. households. *Resources, Conservation and Recycling*, 92, 1–10. <https://doi.org/10.1016/j.resconrec.2014.08.010>
- Shaw, D., McMaster, R., & Newholm, T. (2016). Care and commitment in ethical consumption: an exploration of the 'attitude-behaviour gap'. *Journal of Business Ethics*, 136(2), 251–265. <https://doi.org/10.1007/s10551-014-2442-y>
- Sijtsema, S. J., Snoek, H. M., van Haaster-de Winter, M. A., & Dagevos, H. (2020). Let's talk about circular economy: A qualitative exploration of consumer perceptions. *Sustainability (Switzerland)*, 12(1), 286. <https://doi.org/10.3390/su12010286>
- Skarmeas, D., & Leonidou, C. N. (2013). When consumers doubt, Watch out! The role of CSR skepticism. *Journal of Business Research*, 66(10), 1831–1838. <https://doi.org/10.1016/j.jbusres.2013.02.004>
- Sudbury-Riley, L., & Kohlbacher, F. (2016). Ethically minded consumer behavior: Scale review, development, and validation. *Journal of Business Research*, 69(8), 2697–2710. <https://doi.org/10.1016/j.jbusres.2015.11.005>
- Tapaninaho, R., & Heikkinen, A. (2022). Value creation in circular economy business for sustainability: A stakeholder relationship perspective. *Business Strategy and the Environment*. <https://doi.org/10.1002/bse.3002>
- Taufique, K. M. R., Vocino, A., & Polonsky, M. J. (2017). The influence of eco-label knowledge and trust on pro-environmental consumer behaviour in an emerging market. *Journal of Strategic Marketing*, 25(7), 511–529. <https://doi.org/10.1080/0965254X.2016.1240219>
- Testa, F., Di Iorio, V., Cerri, J., & Pretner, G. (2021). Five shades of plastic in food: Which potentially circular packaging solutions are Italian consumers more sensitive to. *Resources, Conservation and Recycling*, 173(June), 105726. <https://doi.org/10.1016/j.resconrec.2021.105726>
- Testa, F., Iovino, R., & Iraldo, F. (2020). The circular economy and consumer behaviour: The mediating role of information seeking in buying circular packaging. *Business Strategy and the Environment*, 29, 3435–3448. <https://doi.org/10.1002/bse.2587>
- Testa, F., Iraldo, F., Vaccari, A., & Ferrari, E. (2015). Why eco-labels can be effective marketing tools: Evidence from a study on Italian consumers. *Business Strategy and the Environment*, 24(4), 252–265. <https://doi.org/10.1002/bse.1821>
- Testa, F., Pretner, G., Iovino, R., Bianchi, G., Tessitore, S., & Iraldo, F. (2021). Drivers to green consumption: A systematic review. *Environment, Development and Sustainability*, 23, 4826–4880. <https://doi.org/10.1007/s10668-020-00844-5>
- Testa, F., Sarti, S., & Frey, M. (2019). Are green consumers really green? Exploring the factors behind the actual consumption of organic food products. *Business Strategy and the Environment*, 28, 327–338. <https://doi.org/10.1002/bse.2234>
- Thøgersen, J. (2006). Media attention and the market for 'green' consumer products. *Business Strategy and the Environment*, 15, 145–156. <https://doi.org/10.1002/bse.521>
- Thøgersen, J., & Ölander, F. (2003). Spillover of environment-friendly consumer behaviour. *Journal of Environmental Psychology*, 23(3), 225–236. [https://doi.org/10.1016/S0272-4944\(03\)00018-5](https://doi.org/10.1016/S0272-4944(03)00018-5)
- Tversky, A., & Kahneman, D. (1974). Judgment under uncertainty: Heuristics and biases. *Science*, 185(4157), 1124–1131. <https://doi.org/10.1126/science.185.4157.1124>
- Vermeir, I., & Verbeke, W. (2008). Sustainable food consumption among young adults in Belgium: Theory of planned behaviour and the role of confidence and values. *Ecological Economics*, 64(3), 542–553. <https://doi.org/10.1016/j.ecolecon.2007.03.007>
- Waldman, D. A., Putnam, L. L., Miron-Spektor, E., & Siegel, D. (2019). The role of paradox theory in decision making and management research. *Organizational Behavior and Human Decision Processes*, 155(June), 1–6. <https://doi.org/10.1016/j.obhdp.2019.04.006>
- Wang, Y., Zhu, Q., Krikke, H., & Hazen, B. (2020). How product and process knowledge enable consumer switching to remanufactured laptop computers in circular economy. *Technological Forecasting and Social Change*, 161(August), 120275. <https://doi.org/10.1016/j.techfore.2020.120275>
- WBCSD. (2018). The new big circle. 1–42.
- White, K., Habib, R., & Hardisty, D. J. (2019). How to SHIFT consumer behaviors to be more sustainable: A literature review and guiding framework. *Journal of Marketing*, 83(3), 22–49. <https://doi.org/10.1177/0022242919825649>
- Whiten, A., & Byrne, R. W. (1997). *Machiavellian Intelligence II: Evaluations and Extensions*. Cambridge Univ. Press.
- World Bank. (2020). Gross Domestic Product 2019. Retrieved from <https://databank.worldbank.org/data/download/GDP.pdf>
- Xu, D. J., Cenfetelli, R. T., & Aquino, K. (2012). The influence of media cue multiplicity on deceivers and those who are deceived. *Journal of Business Ethics*, 106(3), 337–352. <https://doi.org/10.1007/s10551-011-1000-0>
- Yang, Z. J., Aloe, A. M., & Feeley, T. H. (2014). Risk information seeking and processing model: A meta-analysis. *Journal of Communication*, 64(1), 20–41. <https://doi.org/10.1111/jcom.12071>
- Zollo, L., Yoon, S., Rialti, R., & Ciappei, C. (2018). Ethical consumption and consumers' decision making: The role of moral intuition. *Management Decision*, 56(3), 692–710. <https://doi.org/10.1108/MD-10-2016-0745>

How to cite this article: Di Iorio, V., Testa, F., Korschun, D., Iraldo, F., & Iovino, R. (2022). Curious about the circular economy? Internal and external influences on information search about the product lifecycle. *Business Strategy and the Environment*, 1–16. <https://doi.org/10.1002/bse.3243>