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100 practices to foster consumer acceptance in the circular economy

Abstract

The circular economy aims to decouple economic growth from resource input and waste and emission output. For the dissemination of this economic model, the lack of consumer acceptance for circular business models has been identified as a critical barrier. Despite its importance, this issue remains underexplored in academic research. To address this research gap, this study applies a semi-structured literature review approach leading to four contributions: 1) it proposes novel definitions for key terminology in the consumer acceptance context, 2) it develops a theoretical framework that conceptualises consumer acceptance in the circular economy, 3) it creates the most comprehensive overview of consumer acceptance factors to date, and 4) it provides the first comprehensive overview of practices that companies can deploy to foster consumer acceptance for circular business models. Consequently, the study expands existing circular economy, consumer behaviour and innovation theory by conceptualising consumer acceptance in the circular economy. In addition, the study provides practical guidance on consumer acceptance practices to innovation practitioners concerned with circular business models. Therefore, this study can facilitate more sustainable consumer behaviour, accelerating the transition to the circular economy.

1 Introduction

The current economic model follows a linear take-make-dispose approach, which is unsustainable for the environment, economy, and society (Ghisellini et al. 2016; Lieder et al. 2017; A. Urbinati et al. 2017). Sustainability is a growing concern (Jugend et al. 2020) and by some considered to be the most urgent challenge society is facing (Lobos 2017). The circular economy (CE) replaces this linear model by decoupling growth from resource input (Geissdoerfer et al. 2017). With national agendas set on recovering their economies in the post-Covid era, the scalability of circular business models across consumer markets will play a key part in the transition towards a more sustainable economy in the future. Moreover, recent studies observe growing environmental awareness and intention for sustainable consumption among consumers in light of the Covid pandemic (Degli Esposti et al. 2021; Severo et al. 2021), further highlighting the topic's acuteness.

However, the lack of consumer acceptance – including the actual purchasing behaviour – towards circular business models has been identified as a significant barrier for a broad implementation of the CE (Kirchherr et al. 2018). Research on the individual, society, and cultural aspects are underexplored (Singh et al. 2019). Specifically, researchers suggest a more consumer-centric view, as the consumer ultimately accepts or rejects an offer (Kirchherr et al. 2017; Ertz et al. 2019; Salvador et al. 2020). Consumer acceptance in the CE context is deemed particularly important and was already addressed multiple times (Mugge et al. 2018; Singhal, Tripathy, et al. 2019; Tunn et al. 2019). Factors of consumer acceptance, such as price, knowledge or quality, play a particular focus in this context and were identified in different studies (Rexfelt et al. 2009; J. Camacho-Otero et al. 2018; Chamberlin et al. 2018). While initial overviews of such factors exist, researchers have hardly considered the practices needed from companies to influence the consumers' perception of those factors. We deem the focus

on practices as important, as the deployment of practices may enable companies to translate consumer intention into actual behaviour, closing the intention-behaviour gap.

Therefore, this research aims to answer the identified research gaps. Thereby, we will address the lack of theoretical conceptualisation (e.g., definitions) of consumer behaviour in the CE (Juana Camacho-Otero et al. 2017). Further, we will propose a comprehensive list of consumer acceptance factors (Juana Camacho-Otero et al. 2017, 4; Hazen et al. 2017, 459–60) and practices (Hazen et al. 2017, 460; Mugge et al. 2017, 20–21; J. Camacho-Otero et al. 2018, 4). Hence, the study will address the following questions:

RQ1: What is the theoretical conceptualisation of consumer acceptance in the CE?

RQ2: Which factors affect consumer acceptance for circular business models?

RQ3: Which practices can companies deploy to foster consumer acceptance?

The paper is structured as follows: after this introduction (Section 1), the paper illustrates the employed research methodology (Section 2), presents the results of the literature review (Section 3), derives a conceptual framework (Section 4), and concludes with a discussion of the results (Section 5), and some concluding remarks (Section 6).

2 Research methodology

This section illustrates the applied research method. The authors chose a semi-structured literature review. The research approach follows research guidelines from Easterby-Smith et al. (2015). Further, it is informed by Denyer and Tranfield’s (2009) approach, adopting the three research steps data search, data analysis, and data report (Figure 1).

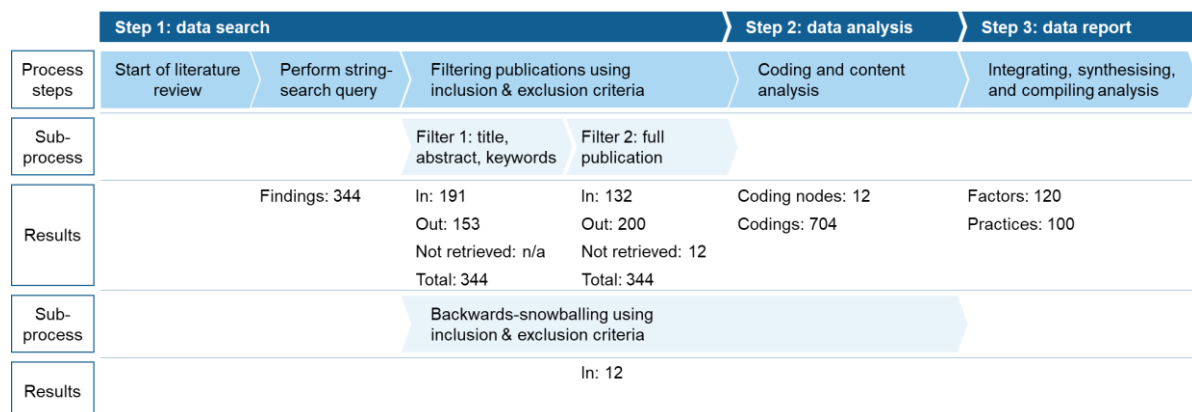


Figure 1 Semi-structured literature review including data search, analysis, and report

In line with previous reviews in the field (Geissdoerfer et al. 2020; Camacho-Otero et al. 2017), a string-based search query was conducted on Scopus on 23 March 2021. Falagas et al. (2008) recommend the use of Scopus over Web of Science and Google Scholar for online-based research queries due to its wider coverage of articles and more consistent accuracy of filtering. This is true for research published after 1995, which covers all research in this review. The search in publications’ titles, abstracts, and keywords yielded 344 results, applying the terms “circular economy” AND behavior* OR acceptance OR adoption AND consumer* OR customer* OR user*.

The authors deployed backwards-snowballing to expand the search and capture research that was not included earlier (Wohlin 2014; Geissdoerfer et al. 2020). In addition, backwards-snowballing was used within newly identified publications until no further documents were found, adding 12 publications. The review qualifies as semi-structured, as definitions for key terms on consumer acceptance were searched purposefully, given the lack of definitions.

Lastly, the search-string results were filtered based on three selection criteria (Table 1). The filtering yielded 132 relevant, and 200 irrelevant, as well as 12 publications to which the authors had no access.

Table 1 Criteria for filtering publications

<i>Criterion</i>	<i>Inclusion criteria</i>	<i>Exclusion criteria</i>
Study type	Article, book chapter, conference paper, conference review, review	Other publication types
Language	English	Other languages than English
Relevance	Addressing “circular economy” and “consumer acceptance” concepts Addressing items, such as history, definitions, theories, drivers, barriers, factors, practices	Not addressing “circular economy” and “consumer acceptance” concepts as the main topics of the study, focus only on either topic Not providing contributions explicitly addressing items in the scope of the study

Source: Own table.

As part of the data analysis, the authors used NVIVO 12 for coding the research in nodes and deployed content analysis, as seen in similar approaches by Camacho-Otero et al. (2017) and Geissdoerfer et al. (2020).

Table 2 Coding nodes and hierarchy for data analysis

<i>Level 1</i>	<i>Level 2</i>	<i>Level 3</i>
Literature review results	History	Origins Development of the literature Trends
	Definitions	Circular consumer behaviour Circular consumer adoption Circular consumer acceptance Circular factors Circular practices
Conceptual framework	Factors of consumer acceptance	Drivers Barriers
	Practices of consumer acceptance	Examples of practices from business Practices suggested by academia

Source: Own table.

For the data report, the authors conceptualised consumer acceptance in the CE in a framework. In addition, we provide a comprehensive overview of factors and practices influencing consumer acceptance, through the integration, synthesis, and compilation of analysis (Geissdoerfer et al. 2020). Experienced researchers were included to countercheck content analysis and coding results, ensuring robustness and consistency. The researchers were selected on their subject knowledge, including circular business model innovation and industrial resilience, and their industry experience, including automotive, chemistry, engineering, food, and logistics.

3 Results from the literature review

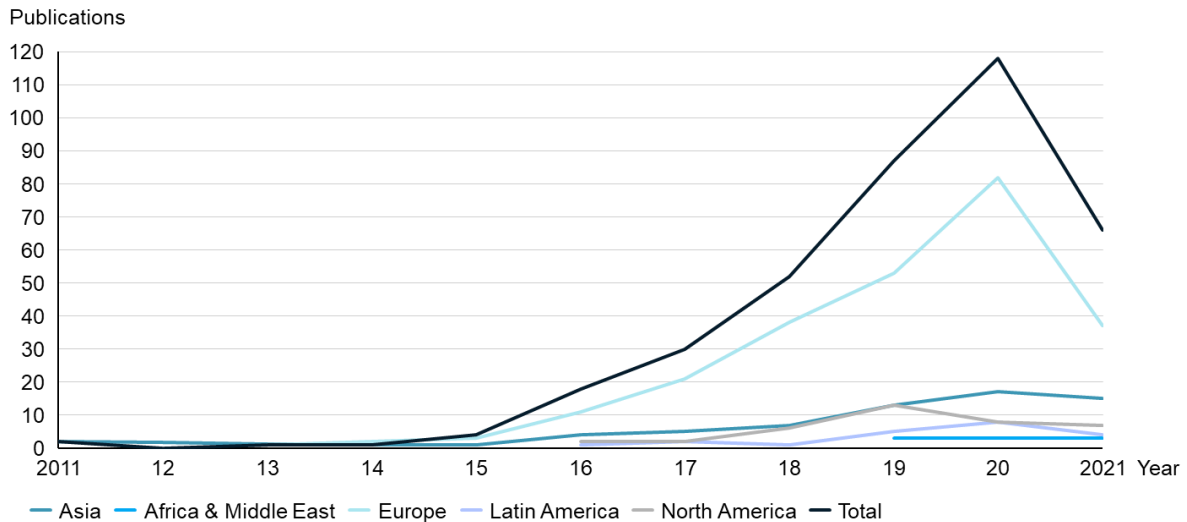
This section shows the results of the review, showcasing the historic coverage of the topic and defining the central terminologies.

3.1 History of the topic

Over 100 publications discuss consumer acceptance in the CE, as described before. Maeda and Taura (2006) are the first to mention consumer reluctance regarding closed loop in a conference in 2005.

The actual term “circular economy” in conjunction with consumer behaviour is first mentioned by Zhilei and Wei (2011).

Research has increased nearly thirtyfold since 2015 (Figure 2). Over 85% of the literature is from 2018 or younger. Given the 52 publication from 2021 by the end of March, a new peak can be expected by the end of the year. While research affiliated with institutions in Europe dominates the total number of publications, Asia is picking up, almost matching the number of publications in 2020 (17) by March 2021 (15). Research from North America, Latin America, Africa and the Middle East is however limited.

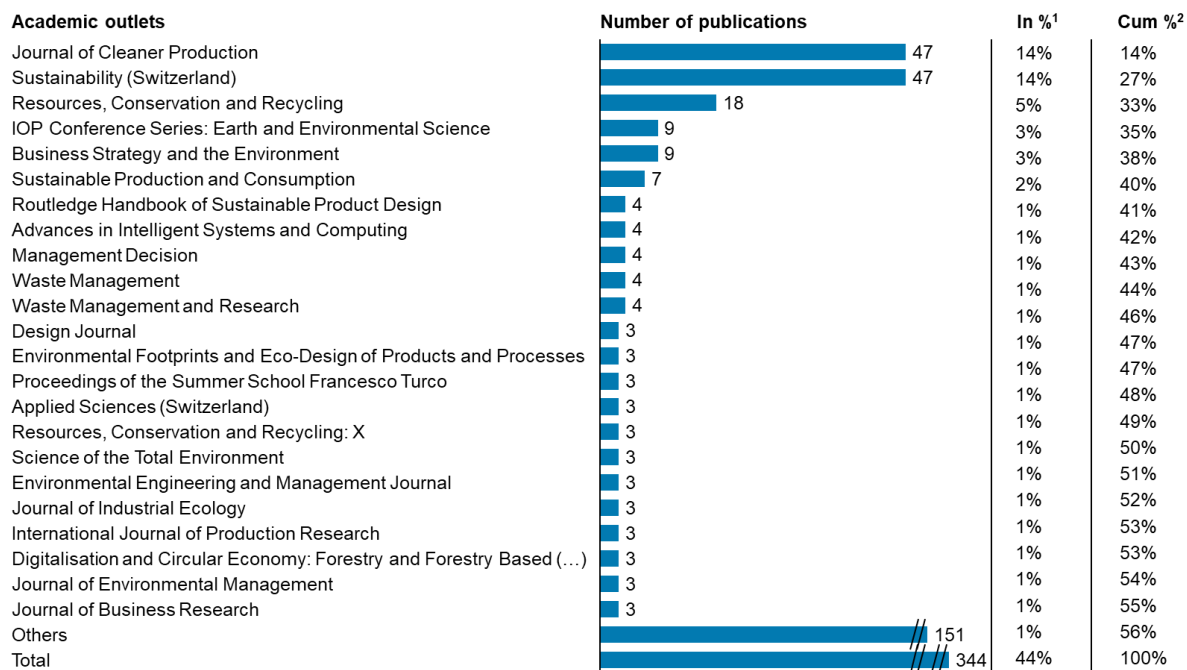


* The graph includes data until 23 March 2021

Figure 2 Publications per year and geography

The literature on the topic is discussed in a diverse list of academic outlets, with only a small number of outlets focussing on it. In total, 127 journals or conference proceedings published on the topic. Their focus ranges from computer science, over engineering, to psychology, and supply management, highlighting the interdisciplinary nature of the research field. The three leading journals issued a third of the total publications. Hence, the expanding literature is strongly influenced by a small number of academic outlets. Yet, a long tail of 151 outlets published once or twice. These include “International Journal Of Entrepreneurship And Innovation Management”, “Ecological Economics”, and “Computers And Industrial Engineering”. Consequently, the literary landscape in the field is fragmented, emphasising the topic’s interdisciplinarity.

A growing field of research discusses factors of consumer acceptance. Kirchherr et al. (2018) highlighted consumer acceptance as a key barrier for CE adoption, popularising the research on acceptance factors. Examples of such factors include consumer awareness, interest, and cultural barriers. Prior, Rexfelt and Hiort (2009) already identified acceptance factors for product-service systems. Van Weelden et al. (2016) and Hazen et al. (2017) list factors for cycling business models, e.g. refurbishing and remanufacturing. In contrast to the research’s predominant focus on Western markets, Hazen et al. (2017) and Wang and Hazen (2016) emphasise the increasing importance of China’s consumer market. In a literature review, Camacho-Otero et al. (2018) propose the most extensive list of factors to date with 34 examples. For this review, the authors aim to build on earlier research to provide the most comprehensive overview of factors. The authors aim to emphasise which areas have already been covered in the literature and which remain underexplored.



¹ Indicates the percentage of total publications represented by the academic outlet

² Indicates the cumulative percentage of total publications represented by the respective academic outlet and the previous outlets

Figure 3 Publications per academic outlet

In contrast to factors, limited research focused on actual practices that companies can deploy to foster acceptance. A prominent example of such a practice is H&M's take-back programme, in which they offer consumer coupons for returning their old clothes (Forlin et al. 2020; Lehner et al. 2020; A. Urbinati et al. 2017). Other authors propose ideas for such practices (Matsumoto et al. 2017; Sarigöllü et al. 2021), given the lack of concrete business examples in the literature. A comprehensive overview of such practices is however missing. The authors further propose to provide such an overview, which would help to match the appropriate factors with practices influencing them. This knowledge would help to understand how companies can reinforce drivers and overcome barriers to consumer acceptance, leading to increased consumer acceptance and thus more sustainable consumption.

3.2 Definitions

The current use of terminologies within the context of consumer acceptance in the CE is leading to confusion and misunderstandings. Despite the growing body of literature focussing on the topic, the relevant terminologies are only poorly defined. This study proposes novel definitions for those terms to contribute to the theoretical conceptualisation of consumer acceptance in the CE. These terms are circular consumer behaviour, consumer acceptance, factors, and practices.

3.2.1 Circular consumer behaviour

Consumer behaviour is the overarching concept that describes the process chain in decision making. Schiffman and Kanuk (2007, p. 3 as cited in Poppelaars et al. 2018, 2) describe it as the entire consumption phase, including the "searching for, purchasing, using, evaluation, and disposing of products and services". Regarding the CE context, Muranko et al. (2018) define pro-circular behaviour as "an action which is brought about due to prioritising resource-efficiency". This description is however unspecific and falls short when compared to Geissdoerfer et al.'s (2017, 759) definition of the CE. Following this, circular consumer behaviour goes beyond resource efficiency and purposefully designs out waste, emissions, and energy leakage.

The authors propose the following definition: *Circular consumer behaviour is a process that includes searching for, purchasing, using, evaluating, and disposing of products and services, while aiming to minimise resource input, waste, emission, and energy leakage by slowing, closing, and*

narrowing material and energy loops. This can be achieved by purchasing, using, and disposing of products or services that are long-lasting by design and that are maintained, repaired, reused, remanufactured, refurbished, and/or recycled repeatedly during their lifecycles.

3.2.2 Circular consumer adoption

Consumer adoption is a subset of consumer behaviour, describing the purchasing process of a single product or service. The concept is widely discussed in psychology. It describes an individual's evaluation process starting with the development of an attitude towards a product or service, the intention to purchase, the actual behaviour, and ending with the use phase. Historically, researchers explored the concepts of "user adoption" or "technology adoption" to evaluate the adoption of new technologies, i.e. email. (Taylor et al. 1995; Renaud et al. 2008; Taherdoost 2018) Similar to "consumer behaviour", "consumer adoption" is described as a process chain in which the consumer becomes aware, selects, purchases, commits to use, and eventually embraces a product or service (Renaud et al. 2008). Yet, consumer adoption can be distinguished from consumer behaviour. First, the former describes the consumption of multiple products or services, whereas the latter focuses on one particular. Second, once a consumer adopts a product or service, he or she cannot "cannot contemplate life without it" (Renaud et al. 2008, 2). Thus, adoption describes the consumer's commitment to a particular product or service. Hence, it is a subset of consumer behaviour, which encompasses whether a consumer is or is not committed to multiple products or services.

The authors define consumer adoption as *a process that is part of consumer behaviour, in which the consumer becomes aware, selects, purchases, commits to use, embraces, and replaces a specific product or service at its end of life, as long as the adoption remains unchanged. This can be achieved by purchasing, using, and disposing of products or services that are long-lasting by design and that are maintained, repaired, reused, remanufactured, refurbished, and/or recycled repeatedly during their lifecycles.*

3.2.3 Circular consumer acceptance

Despite its frequent use, consumer acceptance is not well defined in the CE context. Schrader (1999, 110) defines it as the consumer's readiness to adopt a product or service as a result of a positive preceding attitude, intention, and behaviour. Hence, acceptance is a subset of adoption, ending after the purchase but before the continuous commitment to use, which is part of the adoption process. This understanding is supported by other authors (Meijkamp 2000, 20; Renaud et al. 2008, 2; Simon, 2001 as cited in Taherdoost 2018, 961).

The authors define consumer acceptance as *an outcome of positive intention and behaviour towards the purchase of a product or service and the post-purchase evaluation phase, which is affected by a range of influencing factors. This can be achieved by purchasing and positively evaluating a product or service that is long-lasting by design and that is maintained, repaired, reused, remanufactured, refurbished, and/or recycled repeatedly during its lifecycle.*

3.2.4 Circular consumer acceptance factors

Consumer acceptance is affected by a range of factors (Schrader 1999). More precisely, factors influence a consumer's attitude, subjective norm, perceived behavioural control, or other dimensions, its intention, and its behaviour (Taylor et al. 1995; Renaud et al. 2008; Taherdoost 2018). Studies describe factors as drivers (Allison et al., 2021; Camacho-Otero et al., 2018), barriers (Almefelt et al. 2017; Allison et al. 2021), or do not specify factors further (Rexfelt et al., 2009; Van Weelden et al., 2016; Hazen et al., 2017; Antikainen et al., 2015). Drivers foster consumer acceptance positively, while barriers inhibit it. A factor can however do both, act as a driver or a barrier, depending on the context. A product's or service's "newness" may drive acceptance for some consumers, as they experience pleasure when engaging with something new, i.e. a technology. Other consumers consider "newness" as a barrier. This is called neophobia or technology-neophobia when consumers are afraid to operate a new technology or feel incapable to do so.

Hence, the authors define *factors as elements that either affect circular consumer acceptance positively, making them drivers, or negatively, making them barriers, or both.*

3.2.5 Circular practices

Circular practices allow companies to actively influence consumer acceptance for their circular business models, as they affect how consumers perceive factors. Ackermann et al. (2018) refer to triggers that increase consumer ability or motivation, stimulating consumers to behave in a desired fashion. Mugge et al. (2017, 3) use the term incentives, referring to them as “strategic choices that companies can make concerning the product definition, choice for services, and marketing activities [...] to persuade consumers to purchase” a product or a service. The authors propose the term practice, given the lack of consistent terminology. The Oxford English Dictionary (2021) defines a practice as “the actual application or use of an idea, belief, or method, as opposed to the theory or principles of it”. Hence, the authors understand practice as a method companies use to achieve consumer acceptance, building on their theoretical knowledge of consumer acceptance factors.

We define practice as *a method a company can deploy to foster consumer acceptance for a product or service by altering the consumer perception of circular factors, either by enhancing the positive effect of drivers, by alleviating the negative effect of barriers, or both.*

4 Conceptual framework

This section conceptualises circular consumer behaviour in the CE in a framework and provides an overview of specific factors and practices of consumer acceptance (Figure 4). The framework illustrates consumer adoption, as part of consumer behaviour, based on the provided definitions of the relevant terms. It highlights the interrelations between consumer adoption, practices influencing factors, be it drivers, barriers, or both, and their influence on consumer acceptance.

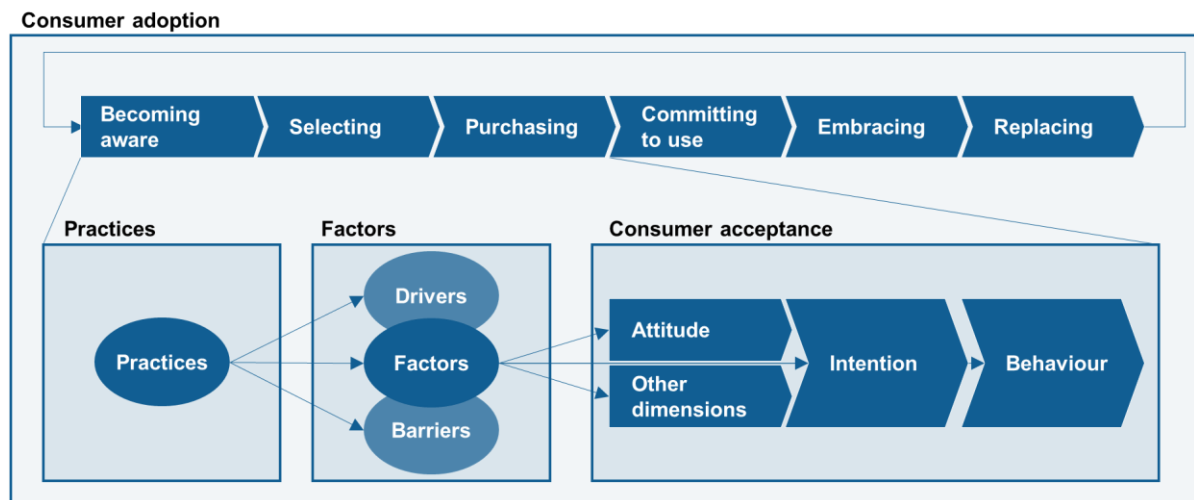


Figure 4 Conceptual framework of circular consumer behaviour

4.1 Factors of consumer acceptance

The authors developed a comprehensive of consumer acceptance factors based on the literature review. It includes a variety of divers and barriers across different categories of acceptance, with some that are more prominent than others. In total, 120 were identified. The authors classified 31 of them as drivers, 27 as barriers, and 62 as both. The drivers are listed in Table 3.

Table 3 Drivers of consumer acceptance

<i>Category</i>	<i>Factor (driver)</i>	<i>Literature</i>
Altruistic reasons	Anticipated conscience	(de Moraes et al., 2021; Gaur et al., 2019; Vehmas et al., 2018)
	Environmental, ethical, moral concerns	(Baier et al., 2020; Barbu et al., 2018; Botelho et al., 2016; Camacho-Otero et al., 2019; Chen et al., 2020; Cherry and Pidgeon, 2018; Coderoni and Perito, 2020; Dokmai, 2018; Gaur et al., 2019; Gazzola et al., 2020; Hazen et al., 2017; Hunka et al., 2021; Hur, 2020; Kabel et al., 2021; Khan and Rundle-Thiele, 2019; Ki et al., 2021; Kim et al., 2021; Koszewska et al., 2020; Lakatos et al., 2018; Lehner et al., 2020; Lieder et al., 2017; Machado et al., 2019; Mugge et al., 2017; Nathan et al., 2021; Nazli, 2021; Perez-Castillo and Vera-Martinez, 2021; Poppelaars et al., 2018; Rogers et al., 2021; Russo et al., 2019; Sharma and Foroapon, 2019; Singhal et al., 2019; Spartano and Grasso, 2021; Stelick et al., 2021; Testa et al., 2020; Vehmas et al., 2018; Wang and Kuah, 2018)
	Perception of company's sustainability	(Núñez-Cacho et al., 2020, 2020; Testa et al., 2020)
	Proximity of product origin	(Coderoni and Perito, 2020; Julião et al., 2019)
Economic motivation	Waste aversion	(Spartano and Grasso, 2021)
	Access to products	(Stål and Jansson, 2017)
	Incentives	(Cordova-Pizarro et al., 2020; Lakatos et al., 2016)
	Residual value	(Stål and Jansson, 2017)
Effort	Avoidance of product responsibility	(Cherry and Pidgeon, 2018)
	Flexibility, freedom	(Lakatos et al., 2018; Stål and Jansson, 2017)
	Sharing of responsibility	(Stål and Jansson, 2017)
Functional attributes	Functionality	(Ackermann et al., 2018; Hunka et al., 2021; Magnier et al., 2019; Wurster and Schulze, 2020)
	Up-to-dateness	(Hunka et al., 2021)
Knowledge	Transparency	(Gazzola et al., 2020; He et al., 2021)
Ownership	Avoidance of paying for idle time	(Cherry and Pidgeon, 2018)
	Avoidance of product obsolescence	(Cherry and Pidgeon, 2018)
Psychological factors	Experience	(Camacho-Otero et al., 2019)
	Experiment	(Camacho-Otero et al., 2019)
	Hedonism	(Ackermann et al., 2018; Barbu et al., 2018; Chen et al., 2020; He et al., 2021; Kim et al., 2021; Machado et al., 2019)
	Identity	(Camacho-Otero et al., 2019)
	Nostalgia	(Camacho-Otero et al., 2019; Machado et al., 2019)
	Originality	(Machado et al., 2019)
Status	Gratification	(Camacho-Otero et al., 2019)
	Recognition	(Vehmas et al., 2018)
Trust	Celebrity testimonials	(Urmínová and Kusá, 2020; Vehmas et al., 2018)
	Energy-labels	(Cooper, 2017)
	Influencers	(Gazzola et al., 2020)
	Quality certification	(Camocho et al., 2020; Matsumoto et al., 2017; Singhal et al., 2019; Wang and Hazen, 2016)
	Warranty	(Cooper, 2017; Gnanapragasam et al., 2018; Hunka et al., 2021; Laitala et al., 2021; Matsumoto et al., 2017; Singhal et al., 2019)

Barriers are illustrated in Table 4.

Table 4 Barriers of consumer acceptance

<i>Category</i>	<i>Factor (barrier)</i>	<i>Literature</i>
Consumer needs	Small product range	(Baier et al., 2020)
Economic motivation	Cost of repair	(Cordova-Pizarro et al., 2020; Kirchherr et al., 2017)
Effort	Financial commitment	(Poppelaars et al., 2018)
	Inertia	(Singh and Giacosa, 2019)
	Mental effort	(Forlin and Scholz, 2020)
Functional attributes	Physical effort	(Forlin and Scholz, 2020)
	Logistical obsolescence	(Zeeuw van der Laan et al., 2019)
	Technological obsolescence	(Zeeuw van der Laan et al., 2019)
Ownership	Limited value offering	(Singh and Giacosa, 2019)
	Relevance of ownership, control	(Gazzola et al., 2020; He et al., 2021; Mostaghel and Chirumalla, 2021; Poppelaars et al., 2018; Raihanian Mashhadi et al., 2019; Singh and Giacosa, 2019; Smol et al., 2018)
Psychological factors	Tangibility of environmental benefits	(Borrello et al., 2017; Muranko et al., 2018)
	Disgust	(Singhal et al., 2019; Spartano and Grasso, 2021)
	Status-quo bias	(Borrello et al., 2017)
Risk	Existential risk	(Nøjgaard et al., 2020)
	Financial risk, unforeseen costs	(Cherry and Pidgeon, 2018; Kabel et al., 2021; Poppelaars et al., 2018)
	Lock-in effects	(Cherry and Pidgeon, 2018)
	Possession security	(He et al., 2021)
	Practical risk	(Nøjgaard et al., 2020)
	Responsibility for product condition	(Cherry and Pidgeon, 2018)
	Risk aversion	(Bigliardi et al., 2020; Borrello et al., 2017; Camacho-Otero et al., 2019; Cattaneo et al., 2019; Cherry and Pidgeon, 2018; He et al., 2021; Kabel et al., 2021b; Matsumoto et al., 2017; Russo et al., 2019; Singh and Giacosa, 2019; Singhal et al., 2019)
Safety	Sustainability risk	(Nøjgaard et al., 2020)
	Uncertainty	(He et al., 2021)
	Contamination	(Magnier et al., 2019)
	Hygiene	(Camacho-Otero et al., 2019; Kim et al., 2021; Singh and Giacosa, 2019)
Situational factors	Operational difficulties	(He et al., 2021)
Trust	Corporate hypocrisy	(Ki et al., 2021b; Testa et al., 2020)
	Technology neophobia	(Camacho-Otero et al., 2019; Coderoni and Perito, 2020)

62 of the factors were identified as both, drivers and barriers. For example, some consumers consider eco-labels trustworthy (Camocho et al. 2020), making them a driver. Other consumers associate them with information overload and perceive their lack of knowledge to evaluate the information provided (Baier et al. 2020), making them a barrier. Factors of consumer acceptance, that classify as drivers and barriers are illustrated in Table 5

Table 5 Factors of consumer acceptance, that classify as drivers and barriers

<i>Category</i>	<i>Factor (driver or barrier)</i>	<i>Literature</i>
Altruistic reasons	Altruism	(de Morais et al., 2021; Gaur et al., 2019; Vehmas et al., 2018)
Consumer needs	Bio-based materials	(Baier et al., 2020)
	Consumer innovativeness	(Camacho-Otero et al., 2019; Camocho et al., 2020; Testa et al., 2020)
Design	Meeting the consumer needs	(Barbu et al., 2018; He et al., 2021; Núñez-Cacho et al., 2020)
	Technological newness	(Zhilei and Wei, 2011)
	Disassemblability	(Cooper, 2017; Nazli, 2021)
	Recognisability	(Magnier et al., 2019)
Economic motivation	Repairability	(Ackermann et al., 2018; Bigerna et al., 2021; Cooper, 2017)
	Deposits	(Cordova-Pizarro et al., 2020)
	Economic reasons	(Lehner et al., 2020)
	Penalty fees	(Cordova-Pizarro et al., 2020)
	Price	(Ackermann et al., 2018; Baier et al., 2020; Camacho-Otero et al., 2019; Chen et al., 2020; Cherry and Pidgeon, 2018; Cordova-Pizarro et al., 2020; Diddi and Yan, 2019; Drábik et al., 2020; Gaur et al., 2019; Gnanapragasam et al., 2018; Hazen et al., 2017; Hur, 2020; Kabel et al., 2021, 2020; Laitala et al., 2021; Lieder et al., 2017; Ma et al., 2017; Magnier et al., 2019; Matsumoto et al., 2017; Mugge et al., 2017; Nathan et al., 2021; Nazli, 2021; Perez-Castillo and Vera-Martinez, 2021; Rogers et al., 2021; Schallehn et al., 2019; Sharma and Foropon, 2019; Smol et al., 2018; Spartano and Grasso, 2021; Stelick et al., 2021; Urbinati et al., 2017; Urmínová and Kusá, 2020; Vehmas et al., 2018; Wagner and Heinzl, 2020; Wang and Kuah, 2018; Wang et al., 2020; Zhilei and Wei, 2011)
Willingness to pay premium	(Bigerna et al., 2021; Dokmai, 2018; Hunka et al., 2021; Julião et al., 2020; Kim et al., 2021; Magnier et al., 2019; Mostaghel and Chirumalla, 2021; Poppelaars et al., 2018; Russo et al., 2019; Shao, 2019; Stål and Jansson, 2017)	
Effort	Convenience, ease of use	(Barbu et al., 2018; Camacho-Otero et al., 2019; Canto et al., 2021; Cherry and Pidgeon, 2018; Cooper, 2017; Cordova-Pizarro et al., 2020; Lehner et al., 2020; Smol et al., 2018)
Functional attributes	Aesthetics	(Ackermann et al., 2018; Baier et al., 2020; Hur, 2020; Kabel et al., 2021; Wagner and Heinzl, 2020)
	Comfort	(Baier et al., 2020)
	Conformance	(Kabel et al., 2021)
	Durability, longevity	(Baier et al., 2020; Bigerna et al., 2021; Chen et al., 2020; Gnanapragasam et al., 2018; Jaeger-Erben et al., 2021; Kabel et al., 2020; Koszewska et al., 2020; Nazli, 2021; Sharma and Foropon, 2019; Stål and Jansson, 2017)
	Efficiency	(Sharma and Foropon, 2019)
	Features	(Kabel et al., 2020)
	Performance	(Gnanapragasam et al., 2018; Kabel et al., 2021, 2020; Matsumoto et al., 2017; Mugge et al., 2017; Singh and Giacosa, 2019; Wagner and Heinzl, 2020)
Knowledge	Quality	(Baier et al., 2020; Bigliardi et al., 2020; Camacho-Otero et al., 2020; Chen et al., 2020; Cherry and Pidgeon, 2018; Drábik et al., 2020; Gazzola et al., 2020; He et al., 2021; Hunka et al., 2021; Kabel et al., 2021, 2020; Laitala et al., 2021; Ma et al., 2017; Matsumoto et al., 2017; Mugge et al., 2017; Nathan et al., 2021; Nazli, 2021; Sharma and Foropon, 2019; Stål and Jansson, 2017; Vehmas et al., 2018; Wang and Kuah, 2018; Wang and Hazen, 2016)
	Serviceability	(Gaur et al., 2019; Kabel et al., 2020; Lieder et al., 2017; Nazli, 2021; Poppelaars et al., 2018)
	Taste	(Canto et al., 2021; Spartano and Grasso, 2021)
	Awareness, familiarity, knowledge	(Baier et al., 2020; Botelho et al., 2016; Cordova-Pizarro et al., 2020; He et al., 2021; Kongelf and Camacho-Otero, 2020; Lakatos et al., 2016; Lehner et al., 2020; Ma et al., 2017; Matsumoto et al., 2017; Mugge et al., 2017;

		Núñez-Cacho et al., 2020; Poppelaars et al., 2018; Shao, 2019, Sijtsema et al., 2020; Singhal et al., 2019; Van Weelden et al., 2016; Wagner and Heinzl, 2020; Wang and Kuah, 2018; Wang et al., 2020; Wang and Hazen, 2016)
	Consumer propensity to seek information	(Testa et al., 2020)
	Consumer skills	(Cooper, 2017; Diddi and Yan, 2019; Jaeger-Erben et al., 2021)
	Information availability	(Botelho et al., 2016; Camacho-Otero et al., 2019; Cherry and Pidgeon, 2018; Cooper, 2017; He et al., 2021; Testa et al., 2020)
	Knowledge of product's provenance	(Gazzola et al., 2020; Nathan et al., 2021; Vehmas et al., 2018; Wang et al., 2020)
	Knowledge of the role of the consumer	(Mylan et al., 2016)
	Knowledge of eco-labels	(Testa et al., 2020)
	Promotion, marketing	(Urbinati et al., 2017)
	Understanding	(Kongelf and Camacho-Otero, 2020)
Ownership	Materialism, possessiveness	(Camacho-Otero et al., 2019; Cooper, 2017)
Psychological factors	Emotional attachment, involvement	
	Fashionability, trendiness	(Barbu et al., 2018; Laitala et al., 2021; Vehmas et al., 2018)
	Location, environment of transactions	(Camacho-Otero et al., 2019)
	Perception of (un-)naturalness	(Borrello et al., 2017; Cattaneo et al., 2019; Coderoni and Perito, 2020; Julião et al., 2019; Nathan et al., 2021)
	Political position	(Camacho-Otero et al., 2019)
	Social contact	(Camacho-Otero et al., 2019; He et al., 2021, 2021; Machado et al., 2019)
	Socio-technical environment	(Botelho et al., 2016; Camacho-Otero et al., 2019; Cherry and Pidgeon, 2018; Mylan et al., 2016)
	Uniqueness	(Camacho-Otero et al., 2019)
Risk	Moral risk	(Nøjgaard et al., 2020)
	Personal liability	(Camacho-Otero et al., 2019)
Safety	Health, well-being	(Camacho-Otero et al., 2019; Canto et al., 2021; Cattaneo et al., 2019; Cherry and Pidgeon, 2018; Coderoni and Perito, 2020; Hur, 2020; Kabel et al., 2021; Macneill et al., 2020; Nathan et al., 2021; Spartano and Grasso, 2021)
	Nutritional content	(Coderoni and Perito, 2020; Spartano and Grasso, 2021)
	Reliability, safety	(Cherry and Pidgeon, 2018; Coderoni and Perito, 2020; Gnanapragasam et al., 2018; He et al., 2021; Hunka et al., 2021; Ma et al., 2017; Mostaghel and Chirumalla, 2021; Wurster and Schulze, 2020)
Situational factors	Accessibility of waste handling options	(Cherry and Pidgeon, 2018; Cordova-Pizarro et al., 2020; Drábik et al., 2020; Lehner et al., 2020; Macneill et al., 2020; Smol et al., 2018; Wagner and Heinzl, 2020)
	Geographical location	(Botelho et al., 2016)
	Policy, regulatory structures	(Macneill et al., 2020)
	Storage space	(Lehner et al., 2020)
	Technical support	(Gaur et al., 2019)
	Time	(Ackermann et al., 2018; Borrello et al., 2017; Cherry and Pidgeon, 2018; Cooper, 2017; Diddi and Yan, 2019; Kabel et al., 2020; Lehner et al., 2020; Nazli, 2021)
Status	Need for social status	(Camacho-Otero et al., 2019; de Morais et al., 2021; Hur, 2020; Laitala et al., 2021; Machado et al., 2019; Nathan et al., 2021; Nazli, 2021; Rogers et al., 2021; Vehmas et al., 2018; Wang and Kuah, 2018)
Trust	Avoidance of ambiguity, asymmetry	(Wang et al., 2020)
	Consumer reviews	(Matsumoto et al., 2017)
	Eco-Label	(Baier et al., 2020; Camocho et al., 2020)
	Image of company, brand	(Camacho-Otero et al., 2020; Cherry and Pidgeon, 2018; Coderoni and Perito, 2020; Cooper, 2017; Gaur et al., 2019; Gnanapragasam et al., 2018;

	Machado et al., 2019; Matsumoto et al., 2017; Mostaghel and Chirumalla, 2021; Poppelaars et al., 2018; Sharma and Foroapon, 2019; Singhal et al., 2019; Vehmas et al., 2018; Wagner and Heinzl, 2020)
Information coherence	(Testa et al., 2020)
Neophobia	(Baier et al., 2020; Camacho-Otero et al., 2020; Cattaneo et al., 2019; Chen et al., 2020; Coderoni and Perito, 2020; Cooper, 2017; Gaur et al., 2019; Gnanapragasam et al., 2018; Hunka et al., 2021; Hur, 2020; Jaeger-Erben et al., 2021; Laitala et al., 2021; Mugge et al., 2017; Nathan et al., 2021; Smol et al., 2018; Spartano and Grasso, 2021)
Trust, mistrust	(Barbu et al., 2018; Bigliardi et al., 2020; Cattaneo et al., 2019; Cordova-Pizarro et al., 2020; Drábik et al., 2020; He et al., 2021; Hunka et al., 2021; Koszewska et al., 2020; Spartano and Grasso, 2021; Testa et al., 2020; Wagner and Heinzl, 2020)
Word of mouth	(Cooper, 2017; Lieder et al., 2017)

All factors were assigned to 14 categories, some of which are more prominent than others. The most common category was psychological factors (17 factors per category), followed by trust (15), functional attributes (12), risk (11), economic motivation (10), and knowledge (10). The quantity of factors per category does however not signify more importance, as the individual factors' effect on consumer acceptance is context-specific.

The research's focus on individual factors differs significantly. Price is discussed 36 times in total, mostly as a barrier to consumer acceptance. As an exception, Vehmas et al. (2018) highlight that some surveyed UK consumers associate higher prices for ethical clothes with higher quality, while some French consumers associate it with higher social status. Other frequently mentioned factors include environmental and ethical impact concern (36), quality (23), awareness, familiarity, knowledge (20), and neophobia (16).

The research highlights the factors' diversity across different impact categories. Even though some factors are discussed more prominently than others, their importance to explain consumer acceptance can only be approximated. Hence, empirical research would be needed to test their importance.

4.2 Practices of consumer behaviour

The authors identified a diverse range of 100 practices that companies can deploy to foster consumer acceptance (Table 6): 19 are examples of companies, that have implemented the practices in real-life settings. For example, Nudie Jeans offer their customers free repairs (Stål et al. 2017; Cordova-Pizarro et al. 2020) while iFixit.com offers repair guides (Ackermann et al. 2018; Haines-Gadd et al. 2018), both addressing the factor repairability. 59 are suggestions from the literature that do not explicitly refer to implemented examples in the industry. Still, concrete applications of those practices may exist even though not emphasised in the literature. For example, Testa et al. (2020) propose to deploy information communication technology, e.g., barcodes or QR-codes, to allow consumers to access sustainability-related information easily, addressing acceptance factors such as effort, environmental benefits, and information availability. This practice was already deployed, e.g., for grocery shopping (Atkinson 2013). As highlighted in Table 6, a single practice, such as providing access to real-time information, may address multiple categories of acceptance factors at once, such as altruistic reasons, effort, knowledge, risk, and trust. Other practices may address different sets of categories or are specific to a single category, highlighting their diverse use cases. Lastly, we propose 22 practices that suggest themselves in the literature but are not explicitly exposed as such by the authors. We included this third category of practices to account for the limited coverage of practices in the literature to date, as suggested by one of the reviewers upon outline submission.

While most of these practices are only mentioned once or twice, others are discussed more frequently. A prominent example is a take-back programme, which is mentioned eleven times. In the case of H&M, consumers are offered coupons in return for worn clothes (Andrea Urbinati et al. 2017; Forlin et al. 2020; Lehner et al. 2020). Other prominent examples are eco-labelling and environmental certification (9), communication of environmental benefits and importance (6), warranties (6), and the involvement of celebrities as designers, advocates, and entrepreneurs (5).

Table 6 Practices of consumer acceptance

<div style="display: flex; justify-content: space-between;"> <div style="width: 45%; text-align: right;"> <p>Altruistic reasons Consumer needs Design Economic motivation Effort Functional motivation Knowledge Ownership Psychological factors Risk Safety Situational factors Status Trust</p> </div> <div style="width: 50%; text-align: left;"> <p>Practices without industry examples Practices suggested by authors</p> </div> </div>												
Category	Practice										Source	
x	x	x	x	x	x	x	x	x	x	x	Act as a broker	x
x				x	x						Address consumer as "doers" rather than "users"	x
					x	x	x	x	x	x	Affiliate with well trusted brands	x
x				x	x						Allow consumer involvement in circular projects to drive consumer engagement	x
					x	x			x		Allow consumer to create relationships with products	x
x					x	x			x	x	Allow for more social interaction	
					x	x					Allow for nostalgia	x
	x			x	x				x	x	Allow for reviews on platform	x
					x						Allow nostalgia and memory association with products	x
				x	x	x	x	x	x	x	Allow virtual exchange with community and showcasing the individual's personality	x
x					x				x		Ask consumers to pledge to consume sustainably	x
				x	x	x	x	x	x	x	Bring together consumer in events to stimulate social relations	x
				x	x	x	x				Communicate clearly, consistently and set expectations right	x
x					x						Communicate emissions of alternative products or behaviours	x
x					x						Communicate environmental benefits of CE and importance of the consumer	x
					x				x		Communicate health information	x
					x				x		Communicate hygiene through services	x
				x					x	x	Communicate premium features	x
x				x					x	x	Communicate the products' degree of newness	x
x					x				x	x	Conspicuous conservation	x
					x						Create excitement, joy through carefree offer	x
				x					x		Demystify good value of cheap products	x
				x	x						Design for (temporary) personalisation or customisation	x
				x	x						Design for disassembly	x
				x	x				x		Design for easy cleaning	x
x	x				x	x					Design for emotional durability	x
x	x				x				x		Design for upgradability and adaptability	x
				x	x				x		Design products for optimal shipment	x
				x					x	x	Display sustainable products separately in stores or online	x
x				x	x	x					Educate consumers on eco-labels	x
x					x						Employ eco-labelling or environmental certifications	x
				x	x	x			x		Encourage to consume durable products	x
					x				x		Enhance accessibility of take-back services	x
				x	x				x	x	Enhance and communicate quality, performance, reliability of products	x
				x					x		Ensure operational excellence to build a good reputation	x
x					x						Extend customer loyalty programmes from sales value to return frequency	x
x									x		Frame green consumption as prosocial behaviour	x
					x						Gamify circular behaviour	x
					x				x	x	Guarantee minimal or unlimited repair service or spare part availability	x
x					x				x		Highlight the innovativeness of circular products or services	x
					x				x		Identify consumers that have a history of circular consumption	x
					x				x	x	Implement consistent business practices and product portfolio	x
					x				x	x	Increase accessibility to circular behaviour options in daily routines	x
x					x						Increase costs for non-circular alternatives	x
					x				x	x	Increase quality of product (and potentially price) and offer repair service	x
x					x	x			x		Install deposit system to encourage give-back schemes	x
x					x	x			x		Introduce circular tag or logo that is visible on products	x
					x						Introduce repair alliance	x
					x	x			x	x	Involve celebrities as designers, advocates and entrepreneurs	x
					x				x		Involve independent agency to fact-check claims	x

Category											Practice	Source	
											x	Involvement of professionals for signalling	x
		x			x	x	x			x		Leasing products instead of just selling them	x
		x									x	Maintain and control sharing platforms	x
												Make arrangement process for product return effortless	
x											x	Make benefits of CE and consumer participation tangible	x
											x	Make cycled products' provenance traceable	x
											x	Make information on circularity easily available to consumers	x
		x										Make spare parts available as producer	x
	x											Marketing & sales of circular options	x
		x										Offer all-inclusive services	x
		x										Offer financing options	x
		x	x									Offer free mending, repair service	x
		x										Offer lucrative offers and discounts to attract first customers	x
												Offer non-committal service	x
												Offer referral bonus	x
		x										Offer renting spare and sacrificial devices to reduce practical risk	x
		x	x									Offer repair service	x
		x										Offer rewards in take-back programs	x
	x											Offer selection of return or collection types	x
											x	Offer service contracts for refurbishment, repair, upgrade or maintenance	x
											x	Offer test phase	x
												Open stores specifically for circular products	x
											x	Partake in circularity index	x
		x										Portray cleanliness of products via (digital) store space design	x
	x										x	Promote taking part in closed loop supply chains as giving products a new life	x
	x										x	Provide access to real-time information	x
	x	x									x	Provide access to well-known and exclusive brands and products	x
	x										x	Provide consumer information on the fate of their end-of-life devices	x
												Provide data securement services when recovering end-of-life devices	x
												Provide excellent service experience	x
												Provide guidance, education about circular behaviour options	x
												Provide information on product cleaning or sanitisation	x
												Provide performance scale to convince consumer of performance quality	x
	x											Provide remote updates to ensure technological newness	x
												Provide repair guides	x
	x	x										Provide transparent information on recovery processes and product history	x
												Require return fees for products	x
												Run informational campaigns	x
												Send mail order repair kits	x
	x											Share sustainability reports	x
	x											Show sustainability levels of products and highlight level of particular products	x
	x											Signal sustainable recycling practices of end of life devices	x
	x											Sustainable communication	x
												Train employees as circularity ambassadors	x
												Use higher price to denote a higher quality or higher status	x
												Use influencers	x
	x											Use lifespan labels	x
	x											Use sustainable materials	x
												Use sustainable packaging	x
												Warranties	x

While the authors suggest the possible influence of practices on certain factors categories, these interdependencies were not tested, nor were the individual practice's importance evaluated. However, testing these interrelations empirically would be of managerial importance, as it would help companies to select the appropriate practices for their business models and respective consumer

acceptance factors. While the current research focuses on these factors in the form of overviews or frameworks (Rexfelt et al., 2009; Van Weelden et al., 2016; Hazen et al., 2017; J. Camacho-Otero et al., 2018, 2018; Antikainen et al., 2015), practices of consumer acceptance are hardly researched purposefully, much less in overviews or frameworks. Considering this literature gap, more empirical research on the topic would help to extend the provided overview of practices.

5 Discussion

This section discusses the findings from the literature review and their implications for answering the research questions.

The topic of consumer acceptance in the CE was recognised as important by Kirchherr et al. (2018) and was discussed in over 100 publications since 2011 (Camacho-Otero et al., 2018; Ghisellini et al., 2016; Hazen et al., 2017; Urbinati et al., 2017; Van Weelden et al., 2016). Yet, despite the growing research interest from diverse disciplines and geographies, the topic is still lacking a clearly defined theoretical conceptualisation. Other researchers call for the definition of key terms (Juana Camacho-Otero et al. 2017), which helps to develop a common understanding and avoid the use of interchangeable terminologies or even misunderstandings. Hence, we defined the most relevant terms for this study's topic, which are circular consumer behaviour, adoption, acceptance, factors, and practices. Moreover, we illustrated their interrelations in a conceptual framework. Thereby, we aim to contribute to the concept's clarity and facilitate future research, that builds on a common understanding and consistent use of terminology.

We extended the research on consumer acceptance factors with the most comprehensive overview to date. While previous research papers had a narrow focus, which resulted in a fragmented knowledge base, we unified the existing research. Thereby, we developed an overview of 120 consumer acceptance factors in total, spanning over 14 categories and including 31 drivers, 27 barriers, and 62 factors classifying as both. Despite this comprehensive overview, further research is needed to evaluate these factors empirically. This research would help to understand under which circumstances consumers perceive factors as drivers or barriers, which is relevant for close to half of the identified factors. This knowledge is important, as the same consumer may react to the same factor differently, depending on the context. For instance, a given consumer may perceive high prices for consumer goods, such as milk or bread, as a barrier. Yet the same consumer may perceive high prices for clothes as a driver, since high prices may be associated with status or quality (Vehmas et al. 2018). Hence, companies need to understand individual consumer preferences to foster acceptance successfully, beyond the simple knowledge of existing consumer acceptance factors.

In contrast to factors, which were researched and presented in lists or overviews (Rexfelt et al. 2009; J. Camacho-Otero et al. 2018; Chamberlin et al. 2018), practices of consumer acceptance have largely been neglected in the literature. Hence, we proposed the first such overview to our knowledge, consisting of 100 practices. The majority of these practices were suggestions from previous authors (59), 22 are suggestions from the authors of this study, and the rest are concrete business examples (19). Even though previous authors suggested such concrete examples as opportunities for future research (Hazen et al., 2017, 460; Mugge et al., 2017, 20–21; Camacho-Otero et al., 2018, 4), no research has focused on listing practices comprehensively. This illustrates the continuous focus on factors over practices that companies can deploy. Further, the study highlighted how practices can affect multiple factors at the same time. From a managerial perspective, it is important to understand these interrelations between practices and factors, to identify and deploy the appropriate practices to foster consumer acceptance effectively.

We identified further research gaps through the review. The identified factors and practices are applicable for a range of circular business model strategies, such as cycling, extending, and intensifying, as defined by Geissdoerfer et al. (2020). However, one of these strategies was not explicitly addressed, which is dematerialising. Dematerialising aims to substitute materials with services or digital alternatives, e.g., e-books, e-papers, or online banking. An explanation could be that authors categorise dematerialising as a technology-enabled strategy, but do not associate it with CE

in the literature. While groups of authors focus on selected industries, e.g., consumer electronics, food, and fashion, other high-emission industries, e.g., building, were mostly neglected. Moreover, the discussed industries largely display a consumer focus, while business-to-business industries are hardly discussed. Considering the high volumes of resources that are handled by a small number of stakeholders in professional markets, compared to business-to-consumer markets, this field requires research attention. Hence, we acknowledge the potential coverage of these topics within our study, based on the gaps in the existing literature.

With this research, we hope to extend the current knowledge on theory and practice by providing definitions for the most relevant terms, conceptualising the concept in a theoretical framework, providing a comprehensive overview of factors as well as practices that companies can deploy to foster consumer acceptance. Thereby, we aim to support managerial-decision making concerned with circular consumer behaviour and thus facilitate the transition towards a more circular economy.

6 Conclusion

This section reports this study's contributions to theory and practice, highlights its limitations, and suggests avenues for future research.

We answered the first research question – *How is the topic of consumer acceptance towards the CE conceptualised?* – by defining the relevant terms for consumer acceptance and developing a theoretical framework. Thereby, we contribute to the understanding of the concept, helping future researchers to avoid the interchangeable or false use of terminology. Further, we highlight the interrelationships between the different elements in circular consumer behaviour, reducing misunderstanding of the concept and help future researchers to build on a common theoretical concept.

We responded to the second research question – *Which factors affect consumer acceptance for circular business models?* Based on the review approach, we listed 120 factors, which we assigned to 14 categories. Thereby, we proposed the most comprehensive overview of factors to date. Thereby, we consolidate the fragmented literature on the field, providing a knowledge base that pertains to different business model strategies, industries, and regions. Yet, we also identified research opportunities to further complement this list. For practice, we inform companies about the diverse range of factors that impact their consumers' acceptance.

We replied to the third research question – *Which practices can companies deploy to foster consumer acceptance by innovating their circular business models?* We identified 100 practices of consumer acceptance, which is the first comprehensive overview of practices to date. Thereby, we address the identified literature gap and contribute to the theoretical understanding of consumer acceptance practices. Moreover, we extend the research discussion from the current focus on passive factors to practices that companies can deploy to actively foster consumer acceptance. For practice, this overview informs managerial decision-making about identifying, selecting, and deploying appropriate practices. Thereby, companies can implement such practices, as a form of circular business model innovation, to enhance consumer acceptance and thus accelerate their transition to the CE.

This study's generalisability and applicability are limited. The review methodology did not consider grey literature. Considering the topic's newness and practical relevance, this research stream may hold further insights, specifically with regards to practices. Further, the semi-structured review approach allows for freedom in the snowballing process. This approach may result in a lack of randomised representative, which can cause selection bias (Geissdoerfer et al. 2017). Even though the literature refers to some factors solely as drivers and others as barriers, they may in fact qualify as both depending on the context, which was not considered in this study. Moreover, the factors' and practices' impact are dependent on consumer preferences and context, which were not tested empirically. In addition, deploying the identified practices may not result in more sustainability, unless they are used in conjunction with actual circular business models. The results of this study may also apply to unsustainable greenwashed business models, which would contradict their purpose. Even

though factors can impact consumer behaviour directly (Fishbein et al., 1975; Khor et al., 2017; Van Weelden et al., 2016), we did not investigate for which factors and to which degree this is true. Therefore, this study does not specify which factors and practices are suitable to close the intention-behaviour gap, as described by Garcia et al. (2021).

The authors suggest the following avenues for future research, considering the above limitations. Future researchers should consider grey literature in their methodologies to identify and evaluate further practices. Future methodologies should include empirical research to test the identified practices and this limit selection bias and increase representativeness. Moreover, future research should focus on practices of consumer acceptance, which are currently underexplored. This includes more empirical testing to derive the practices' applicability and validity in different contexts and how practices influence factors. This research would help to identify hierarchies and interdependencies between factors and practices, supporting companies to select the appropriate measures. To help companies implement these measures effectively, future research on circular business model innovation in the context of consumer acceptance is needed. In Addition, future research is needed to identify the factors that impact consumer behaviour directly (Mugge et al., 2017) and how practices can enforce these factors, to close the intention-behaviour gap. We recommend this research to investigate different circular business model strategies, industries, and geographies, to account for the differing context conditions, that will require the selection of the appropriate practices and inform the innovation approach.

Given the lack of research on dematerialising business models, future research can close this gap by conducting further reviews and empirical research. In addition, more emphasis should be put on business-to-business markets, which are underexplored. Further, this research does not consider the role of policymakers. Therefore, future researchers should consider the role of policies in the consumer acceptance context. The proposed research would help to extend the theory of consumer acceptance in the CE and help companies to gain acceptance for their business models. Eventually, this research will accelerate the transition towards the CE, sustaining the environment, supporting social development, and enabling economic prosperity.

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