

Fashion Practice

Profile Of A Consumer Who Is Willing To Participate In Circular Business Models: The Case Of Clothing Rental

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4 Dear Professor Sandy Black,
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6 First of all, we would like to thank you for your favorable comments emphasizing the
7 significant effort we put into the first revision. We now proceed to list the comments on
8 the additional revisions. We do hope that the paper meets the requirements to be published
9 in Fashion Practice.
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11 REVIEWER: 1
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13 Thank you for your positive feedback on the new version of the paper. Following your
14 indications, we have made the changes below:
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16 Table 4 presents the percentage of group characteristics instead of frequencies.
17 Therefore, the corresponding comments have been revised.
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19 In Table 5, employment situation has been replaced by labor situation.
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21 We have divided the **Conclusion** section into two parts: **Discussion** and **Conclusion**. The
22 first section contextualizes the study, interprets the results, relates them to those of
23 previous studies, shows practical implications as well as limitations, and suggests future
24 research. In the second, the most important findings are highlighted. As you indicate, this
25 allows us to follow the conventional structure of research articles.
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28 REVIEWER 2
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30 Thank you for your positive assessment of the new version of the paper. We proceed to
31 respond to the suggested modifications which we understand are intended to improve the
32 article. As reviewers of research articles ourselves, we understand that there is always
33 some aspect that can be improved but, as previously indicated, as authors we must comply
34 with the rules of the journal as well as with the suggestions made by the editor.
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37 In the **Introduction**, “new model of transaction” has been modified by “an emerging
38 model of transaction and consumption pattern, driven by sustainability and consumer
39 preferences” (Savelli et al. 2024).
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42 A strong rationale is provided for the analysis of Spanish consumers in the study. Along
43 with the lack of previous research, the need to deepen the analysis of the decision to adopt
44 FR in different social contexts is highlighted (Myin et al. 2023 and Savelli et al. 2024).
45 Accordingly, the characteristics of the Spanish market are also incorporated. Among
46 them, there is an emphasis on the fact that, despite the important role played by price
47 when Spaniards make clothing-related decisions, there is a segment of the market that
48 claims to be interested in sustainable consumption practices. The analysis carried out in
49 the paper could help to reduce the gap between intentions and sustainable behaviors.
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52 The literature review justifies the selection of consumer characteristics. Reference is
53 made to the Theory of personality traits and how they influence consumer behavior. There
54 is also a reference to the work done by Lang and Armstrong (2018a), so that the reader
55 who wishes to delve deeper into these aspects can do so. Given the role played by price,
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4 the choice of price consciousness is also justified. The variables employed have been used
5 in previous research in an attempt to explain FR intentions. References are provided to
6 allow the reader to explore the subject in more depth. The space limitations make it
7 impossible to go in detail into all the aspects analyzed.
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10 In the **Method** section, the method and results parts have been separated. We hope that
11 this will make it easier to follow the process. The Method section includes information
12 on the Cluster methodology, indicating the method and distance used, as well as a
13 footnote with a link. This link allows the reader, if they so wishes, to go deeper into
14 understanding the realization and interpretation of the Cluster analysis.
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16 As already indicated, the paper is part of a broader research (Doctoral Thesis). Given the
17 large number of items used in the proposed model, it was necessary to select items in the
18 aspects related to consumer characteristics, but we logically agree that it is more rigorous
19 to use the full set of measurement items from an existing validated scale. To guarantee
20 the validity of the results, starting from the original works in which the scales were
21 validated in relation to FR intention, we have selected those that had shown the greatest
22 explanatory capacity for each construct. A footnote explaining this fact has been included.
23 It is true that we proceeded to validate the scale corresponding to “Environmental
24 Awareness” since one of the objectives of the original work was to delve deeper into this
25 topic (situation in the Spanish context). As you suggest, we have included this aspect as
26 a limitation of the study.
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30 Table 3 has been modified, including p-values, in order to compare the groups.
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32 The main objective of the questionnaire’s pretest was to detect whether there were
33 problems to understand the items used. This is important to check if the items of personal
34 traits such as materialism, fashion leader, etc. were understood.
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36 It has been clarified that G1 individuals can indeed develop circular consumption
37 practices but that they do so to a lesser extent than G2.
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39 **Conclusions:**

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41 We have divided the **Conclusion** section into two parts: **Discussion** and **Conclusion**. The
42 first section contextualizes the study, interprets the results, relates them to those of
43 previous studies, shows practical implications as well as limitations and future research.
44 In the second, the most important findings are highlighted. This allows us to conform to
45 the conventional structure of research articles.
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48 A justification of the sustainability of FR is included. However, its full justification will
49 undoubtedly require another study.
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51 We have tried to use a more restrained tone when interpreting the results and revising the
52 sections. The translation has been done by a specialist in the field hired for this purpose.
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4 We hope to have fulfilled your requirements and to be able to publish our paper as is our
5 wish. Thank you again for the effort and interest you have shown, which has allowed us
6 to improve the work.
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For Peer Review

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10 **Profile Of A Consumer Who Is Willing To Participate In Circular**
11 **Business Models: The Case Of Clothing Rental**
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33 deals with the circular economy in the fashion industry.. She has publications in CIRIEC-
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49 numerous articles on relationship marketing, tourism, circular economy, price and channels of
50 distribución. She has publications in the International Review of Retail, Distribution and
51 Consumer Research, Journal of Retailing and Consumer Services, Journal of Hospitality &
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Leisure Marketing, Journal of Travel & Tourism Marketing, Journal of Relationship Marketing and International Journal of Contemporary Hospitality Management, Tourism and Sustainable Development Goals, among others.

This study focuses on the fashion sector, where production and consumption models are linear. Product-Service Systems, such as clothing rental, were analyzed to establish the profile of the consumer who is most likely to use them. Data were obtained from an online survey. A cluster analysis was conducted to establish the profile of individuals willing to participate in this Circular Business Model. Results showed a low use of the clothing rental service in the sample analyzed, as well as two profiles of individuals willing to use this service. Group 1, mainly men with a high school degree and no experience in renting or buying second-hand clothing, showed a lower intention to rent. Group 2, mostly women with a university degree and experience in reuse, showed a higher intention to rent and buy second-hand clothing. This research contributes to our understanding of consumer behavior within the context of circular economy business models, specifically in the realm of clothing rental. By explaining consumer profiles and their underlying traits, this study highlights the need to target and engage the right consumer segments. Managers in the fashion industry can leverage these insights to develop effective strategies that promote and optimize the adoption of circular business models. By focusing on the consumer, we can collectively foster a more sustainable and circular future.

Keywords: Product-Service System, Sustainable business models, clothing rental, cluster analysis, consumer segmentation

Introduction

Since the 1990s, fast fashion has been the dominant business model in the clothing sector. Its production and consumption models are extremely linear (Mishra, Jain and Malhotra 2021), making it one of the industries that consumes and destroys the most

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10 resources (Jones and Yu 2021; Riba et al. 2020), in addition to generating an enormous
11 amount of waste (Chan et al. 2020). This industry constitutes a priority area of action
12 for the United Nations (UN), as it is one of the most polluting (European Parliament
13 News 2022). The UN declared the textile sector an environmental emergency on
14 November 26, 2019, following the launch of the Alliance for Sustainable Fashion. This
15 initiative aimed to curb the sector's destructive practices and promote fashion that
16 enhances global ecosystems.
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21 Achieving these goals, however, will require new ways of doing business. Circular
22 Economy (CE) proposes a new economic model that is centered on the efficiency of
23 resources and on an effective value system (Fernandes et al. 2020). Linear flows must
24 therefore be transformed into circular flows according to the basic principles of CE
25 (Honic et al. 2021): *reduce* the use of raw materials and the environmental impact of
26 production and consumption; *reuse*, thereby extending the life cycle of goods; and
27 *recycle*, thereby recovering waste to reprocess it into other products, materials, or
28 substances. The combined effect of these principles helps to significantly reduce
29 pressure on the environment (Kirchherr, Reike and Hekkert 2017) and allows to reach
30 global sustainability (García-Quevedo, Jové-Llopis and Martínez-Ros 2020). Thus, CE
31 can contribute to achieving the Sustainable Development Goals (SDGs) proposed by the
32 UN in its 2030 Agenda (United Nations 2015), which clearly show the serious current
33 problems we are facing regarding sustainability (Sauer mann et al. 2020). This paper
34 specifically mentions SDG 12, which focuses on ensuring sustainable consumption and
35 production patterns, fundamental to CE. It includes targets related to waste reduction,
36 recycling, and the reuse of products. In order to adopt CE, organizations must transform
37 their linear business models into circular ones (Velenturf and Purnell 2021). The
38 extensive numbers of relevant strategies in CE are giving rise to different circular
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10 business models (CBMs) (Centobelli et al. 2020). These models include Product-
11 Service Systems (PSSs), recycling and waste valorization, extending the product life
12 cycle, design for circularity, and sharing platforms. They all require a series of changes
13 for creating and implementing value throughout the entire chain (Awan and Sroufe
14 2022; Nußholz 2017), which needs coordination between partners, technological
15 innovation, waste management systems, connection with the customer, and changes in
16 use and consumption patterns (Colucci and Vecchi 2021; Mishra, Jain and Jham 2020).
17 These disruptive business models comprise a set of interconnected and dynamic
18 components (Liu, Tong and Sinfield 2021) that allow organizations to not only adapt to
19 evolving ecosystems but also to take on challenges and opportunities in the environment
20 (De Angelis 2022). Within the fashion business, circular fashion refers to a regenerative
21 methodology that minimizes waste, pollution, and the use of natural resources in the
22 design, production and consumption of garments and fabrics.
23 The consumer emerges as one of the main facilitators of CBMs (Kirchherr, Reike and
24 Hekkert 2017; Hellström and Olson 2024) and must therefore modify their behavior by
25 reducing consumption, reusing existing products or collaborating in their recycling.
26 Such behaviors correspond to more or less sustainable alternatives (Colucci and Vecchi
27 2021). Thus, reducing consumption could have a direct impact on reducing global
28 production, which would slow down its environmental footprint; reuse extends the
29 useful life of garments, reducing the need to manufacture new ones; and recycling is
30 less efficient due to technological limitations and the energy involved in recycling
31 processes (European Environment Agency 2024). Among these alternatives, reuse is the
32 most sustainable option (Colucci and Vecchi 2021). It can take place through various
33 models, notably including PSSs, such as the sale of second-hand products or the rental
34 of products (Tukker 2015). By making the garments available to more than one
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10 customer, across space and/or time, PSSs intensify the use of those goods. PSSs respond
11 to SDG12, by reducing the number of goods required to meet the consumer's needs.

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13 The fashion industry was paid remarkably little attention, especially in terms of
14 empirical applications (Arrigo 2021; Ki, Chong and Ha-Brookshire 2020). Most of the
15 research conducted focused on the supply-side (Arrigo 2021), underestimating the
16 analysis of the role played by consumers (Aguiar, Nadae and da Silva-Lima 2023). A
17 review of academic literature showed that, in general, the role of the consumer has
18 scarcely been studied (Lakatos et al. 2018), especially regarding their psychographic
19 and demographic characteristics (Musova et al. 2021). This opens a considerable gap in
20 consumer knowledge that must be covered. Knowing the consumers 'willingness to
21 participate in CBMs is key for these models to achieve their objectives.

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28 1. The CBM analyzed was fashion renting (FR) as it represents an ~~emerging-new~~
29 model of transaction and ~~an-emerging~~ consumption patterns, ~~driven by~~
30 ~~sustainability and consumer preferences~~ (Savelli et al. 2024). In addition, fashion
31 manufacturers acknowledge it is an effective way to update their business models
32 (Arrigo 2023) in order to attain a sustainable development of fashion and ecology
33 (Xu et al. 2022). FR is seen as an essential model of the circular system (Lang and
34 Zhang 2024). Most of the past studies on FR used behavioral theories, but these
35 frameworks did not consider the role played by personal characteristics. The
36 analysis of personality traits and psycho-demographic characteristics is an
37 important line of research recently highlighted by Jain et al. 2022. Thus, the aim
38 is to advance existing knowledge by addressing the following research questions:

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- Are there consumer segments that are more likely to participate in FR?
 - If so, what is their psycho-demographic profile?

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This study presents evidence from Southern Europe, specifically Spain, since prior research mainly focused on North America and Asia (Jain et al. 2022). Authors such as Myin et al. 2023 and Savelli et al. 2024 highlight the importance of the social context in this decision process and the Spanish fashion market has its own characteristics. Fashion industry contributes 2.8% of the Spanish GDP. It accounts for 4.1% of the Spanish labour market and 8.7% of its exports (Modaes.es 2023). Spanish consumers may be price-sensitive due to the strong prevalence of fast-fashion brands, like Zara and Mango, in the country (Blas, Lavanga and Codina 2023). Despite this, there seems to be a growing interest among consumers in developing sustainable practices, such as buying sustainable fashion, buying second-hand clothes or renting clothes (Blas, Codina and Sádaba 2023). However, there is little knowledge of the Spanish consumers' intentions towards such practices.

The consumer and fashion reuse business models

For the fashion industry to transition to CE, it must overcome major challenges related to environmental and social issues, while remaining profitable (Pal, Shen and Sandberg 2019). Based on the action areas proposed by the Ellen MacArthur Foundation (2017), the main strategies the industry is applying are the following (Dissanayake and Weerasinghe 2021): resource efficiency, circular design, product life extension and end-of-life circularity. These strategies clearly show that CE is not just a matter of technical processes and recyclable materials. When we talk about fashion, it is essential that we include consumers, given that they are the ones who are responsible for optimizing the use of manufactured garments. Consumers can influence business practices through their purchasing and consumption habits. They should reduce the amount of clothing they buy to improve resource efficiency, make conscious purchasing decisions by choosing brands that meet sustainability criteria, including eco-design, reuse and repair

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10 garments to extend their lifespan, and participate in selective collection and recycling
11 systems to ensure a circular end-of-life process.

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13 Among the many ways in which the use of garments can be optimized (repair, take
14 proper care of, redesign, recycle), reuse is notable. Increasing the number of times that
15 clothes are worn leads to capture material value, reduce waste, pollution, as well as the
16 number of items purchased (Ellen MacArthur Foundation 2017). Extending the lifespan
17 of 10% of the t-shirts on the market would reduce approximately 100,000 tons of CO₂
18 and 2,000 tons of waste per year in the UK alone, provided that the lifespan extension
19 substitutes new purchases (Klepp, Laitala and Wiedemann 2020). This is the context
20 within which collaborative fashion consumption emerges. Researchers suggest that "...
21 consumers, instead of buying new fashion products, have access to already existing
22 garments either through alternative opportunities to acquire individual ownership
23 (gifting, swapping or second hand) or through usage options for fashion products owned
24 by others (sharing, lending, renting or leasing)" (Iran and Schrader 2017, p. 472). The
25 key point here is that two or more people can use the same product in different periods
26 of time, regardless of whether or not ownership is transferred or if a monetary payment
27 is made. Associated with this trend, different business models are emerging (Zhu and
28 Liu 2021), such as PSSs and redistribution systems. PSSs represent value proposals
29 oriented toward the satisfaction of users by delivering functions or services instead of
30 goods (Ceschin and Gaziuluso 2016), while through redistribution, consumers sell or
31 give away their goods to other consumers. In other words, there is no transfer of
32 ownership in PSS and there is in redistribution systems. Both models require major
33 changes in consumer behavior, which notably include giving up the idea of novelty and,
34 occasionally, ownership of a product, in addition to engaging in behaviors that have not
35 been very common up to now, such as returning clothes to suppliers. If such changes are
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10 not accepted by consumers, it will be difficult to implement those models successfully
11 (Dissanayake and Weerasinghe 2021; Hina et al. 2022). PSSs are considered more
12 sustainable and circular than redistribution systems, given that a company retains
13 ownership and the responsibility for maintaining the product (Armstrong et al. 2015;
14 Yang et al. 2018), which also allows to reduce unnecessary consumption (Johnson and
15 Plepys 2021). These models are focused on stimulating both an extension of the useful
16 life and the recovery of products (Nußholz 2017). Their premise is that the objective of
17 the economy is to create greater value of use during the longest possible period of time,
18 thereby consuming fewer material resources and energy as well as optimizing the use
19 and distribution of products in society (Cherry and Pidgeon 2018). Considering the
20 potential sustainability of this business model and the major changes in
21 use/consumption that it involves, it is necessary to look more closely at the profile of
22 consumers who are inclined to participate in this business model.
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31 ***Product-Service Systems: Fashion Rental (FR)***

32 FR is likely to become a significant trend by 2025. A current report estimates that the
33 revenue of the global online clothing rental market is expected to grow up to USD 4
34 1.99 billion by 2029 from USD 1.32 billion in 2024, increasing at a compound annual
35 growth rate of 8,5% from 2024 to 2029. North America had the largest share of the
36 worldwide market in 2023 and this leading position is expected to continue until 2029.
37 Europe is a promising regional market, where Germany had the major share in 2023,
38 followed by the UK. Asia-Pacific is expected to be the most lucrative market. In Spain,
39 this market activity is still an emerging phenomenon. Digital platforms expect to reach a
40 USD 2 billion revenue by 2025 (Market Data Forecast 2024).
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48 Despite its increasing relevance, and even though the study of PSSs related to fashion is
49 on the rise, FR research is still scarce (Paramita 2023). Traditionally, the fashion
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10 industry has focused on product-oriented systems, consequently creating value by
11 complementing pre-existing goods through additional services, such as repairs
12 (Armstrong et al. 2015). However, use-oriented systems are the ones that would allow
13 the development of a novel offer in the fashion industry that would in turn improve
14 sustainability by preventing waste and increasing the marketing of used clothes
15 (Monticelli and Costamagna 2022). In this case, the product is still at the core of the
16 offer, but owned by the supplier, which is the case of rental services (Tukker 2015).
17 FR represents one of the main practices of access-based consumption. It allows
18 consumers to make use of a product for a certain period of time through the payment of
19 a fee, while legal ownership remains with the supplier (Schaefer, Lawson and Kukar-
20 Kinney 2016). Clothing can be used by several consumers, one after the other, thereby
21 increasing the frequency of use and its useful life, which should reduce the amount of
22 new clothes produced and their corresponding environmental impact (Armstrong et al.
23 2015).

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32 Previous studies explored different factors that have an impact on FR activities (Jain et
33 al. 2022). The review conducted by Abbate and others (2023) clearly showed that most
34 of such studies are based on the theory of planned behavior (TPB) (Fishbein and Ajzen
35 1977) and the extensions thereof (Ajzen 1991). In general, it is determined that the
36 rental intention is essentially conditioned by the perceived risks and the associated
37 values (Fani et al. 2022; Paramita 2023). TPB provides insight into how individual
38 attitudes, social norms, perceived behavioral control, behavioral intentions, and
39 behaviors are related. However, it does not consider how consumers use fashion to
40 express their identities (Lang and Armstrong 2018a), since clothing is a symbolic
41 product (Cherry and Pidgeon 2018; Tunn et al. 2021). This symbolism means that the
42 benefits of clothing are essentially intangible, such as the expression of one's own
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10 identity, social status and economic status (Armstrong et al. 2016). The nature of such
11 benefits implies that owning clothes has a strong emotional meaning, and therefore,
12 giving up that ownership could represent a major barrier to rental (Hina et al. 2022).
13 Research suggested the need to analyze the role of consumers' traits on the intention to
14 rent. The trait theory perspective suggests that people have certain characteristics¹,
15 which influence their lifestyle and consumption patterns. As highlighted by Lang and
16 Armstrong (2018a), these personality traits could play a critical role in influencing how
17 consumers respond to different market strategies and how they consume particular
18 products or services. However, in the case of collaborative consumption, not all
19 personality traits seem to influence the intention to rent clothes. These traits can
20 determine their lifestyle and consumption patterns. Thus, fashion leadership, the need
21 for uniqueness and materialism appeared to be highly relevant to apparel consumption
22 and had the greatest potential to provide insight into consumer intentions toward
23 sustainable consumption (Lang and Armstrong 2018a). Economic and psychosocial
24 factors were found to be the main drivers in the collaborative consumption literature
25 related to fashion (Arrigo 2021). Empirical on FR is scarce and hardly conclusive. In
26 general, it seemed that these traits had an indirect impact on the intention to rent (Ki,
27 Park and Ha-Brookshire 2021).

28 Thus, the review of specialized literature conducted highlighted the following aspects:

29 Awareness of prices, related to the consumer's motivation to economize on both
30 monetary and material resources. It refers to an individual's price sensitivity when
31 purchasing products (Lang and Armstrong, 2016). It also indicates that consumers tend
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49 ¹ Costa and McCrae (1992) propose a model with five personality traits: openness to experience,
50 consciousness, extraversion, agreeableness, and neuroticism.
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to be unwilling to pay a higher price and focus on paying a lower price. Price is a critical purchasing driver for the average consumer (Blas, Lavanga and Codina 2023). Rental allows having access to fashion articles at a lower price than the selling price, which is attractive to frugal consumers (Moeller and Wittkowski 2010; Lee and Chow 2020). Price can be a determining element when deciding on whether to rent or buy, especially for consumers who acquire their clothes during periods of sales, who compare prices or who tend to look for low prices (Lang 2018). Although the economic benefits of FR were seen as an important encouraging factor, the results obtained were not conclusive. For example, it was confirmed that price had an indirect, positive and significant effect on the intention to rent fashion through attitude (Lang 2018; Lang and Zhang 2024; Myin et al. 2023) and the utilitarian value (Lee and Chow 2020). However, this indirect effect was not significant in Lee and Huang (2020). The direct effect of price awareness on FR intention, set by Becker-Leifhold (2018), was not-significant.

Personal Innovativeness, defined as an individual's willingness to assume risks and adopt new behaviors (Lang and Armstrong 2018b; Tu and Hu 2018). Individuals with the trait of openness to experience feel closer to new systems and business models~~This feature serves to bring individuals closer to new systems and business models~~, as it affects their ability to assess the perceived relative advantages of a novelty. They are open to new ideas and like to try new products (Tu and Hu 2018). The innovative personality of an individual may affect the decision to adopt the product-service system CBM or not. The effect of this personal innovativeness on FR is exercised indirectly through attitude, which has a positive influence on the intention to rent (Lee and Huang 2020; Tu and Hu 2018).

Fashion leadership, referring to the tendency to buy the latest in fashion before others do, thereby becoming a pioneer in the acceptance of a new style (Kang and Park-Poaps

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2010). [They tend to have an extroverted personality, so they may be more likely to rent clothes as they seek to impress others and be fashionable in their social life.](#) For these individuals, it is important to be a leader in fashion, to know the latest trends and to follow them (Lang and Armstrong 2018a). The current fashion industry continuously promotes new trends, and rental allows consumers to quickly access new products without having to purchase them. Those who consider themselves fashion leaders show a higher intention to rent clothes, since this gives them faster and quicker access to new trends. It has been shown that fashion leadership has a direct effect on FR intention (Lang and Armstrong 2018a). Considering oneself a fashion leader has also an indirect effect through an egoistic value orientation (Becker-Leifhold 2018) or through attitude (Lang and Armstrong 2018b; Lee and Huang 2020; [Myin et al. 2023](#); [Savelli et al. 2024](#)). Fashion leaders help to spread new trends by returning clothes after rental, thereby allowing other consumers to rent them. Spreading the idea of using rented clothes would help to extend the useful life of clothing, while satisfying the desire of consumers to try new ideas.

Need for uniqueness, defined as “the pursuit of differentness relative to others through the acquisition and utilization of consumer goods” (Tian, Bearden and Hunter 2001, p. 52). These individuals look for clothing that lets them create their own, original and unique style (Lang and Armstrong 2018a). Dressing differently is usually considered a non-verbal but visible way to show one’s individuality, although it means using clothes for just a short period of time (Workman and Kidd 2000). Rental offers the opportunity to be both in fashion and unique (Armstrong et al. 2015; McNeill and Venter 2019). However, the direct impact of the need to be unique on the intention to rent has not been empirically validated (Lang and Armstrong 2018a; [Savelli et al. 2024](#)).

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Materialistic nature represents the importance that an individual gives to possessions in their life (Richins 2004). Materialistic individuals consider their possessions to be one of their main achievements. Therefore, they will need to consume excessively and will show an unfavorable attitude towards rental (Lang and Armstrong 2018a). The results obtained were not conclusive: Becker-Leifhold (2018) did not verify the indirect effect of this trait on the intention to rent fashion, while Lee and Chow (2020) did. On the other hand, Lang and Armstrong (2018a) corroborated its direct negative effect on that intention.

Environmental awareness, referring to the importance that individuals give to the environmental benefits that are derived from their consumption attitude (Mohr, Web and Harris 2001). This is one of the most studied aspects regarding sustainable consumption, green consumption, and collaborative consumption (Fani et al. 2022). It reflects a conscientious, responsible personality, so people who show this aspect are likely to adopt renting if they see it as a way to reduce overconsumption and minimize waste of resources. In general, it was observed that such individuals were more interested in ecological lifestyles, therefore carrying out actions related to the protection of the environment and carefully selecting the products they acquired. The socially responsible behavior of consumers seemed to be associated with socially responsible consumption (Grebosz-Krawczyk and Siuda 2019).

Given the environmental benefits derived from FR, more environmentally aware consumers should be more likely to rent fashion (Armstrong et al. 2015). However, since the research on the effects of sustainability on fashion preferences is recent, the results obtained were contradictory. Some studies showed that sustainability did not have a positive effect on consumer preferences (Achabou and Dekhili 2013), while others corroborated a positive relationship (Grazzini, Acuti and Aiello 2021). In the

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10 case of FR, this contradiction remained, given that Becker-Leifhold (2018) did not
11 detect such a relationship, while in other studies it was significant, although indirect
12 through the utilitarian value (Lee and Chow 2020) or through attitude (Baek and Oh
13 2021; Lee and Huang 2020).

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16 It must be kept in mind that the preceding factors are conditioned by social, economic,
17 and demographic variables (Gazzola et al. 2020; Musova et al. 2021). However, these
18 variables were barely studied, and in general they were not related to any specific CBM
19 (Jain et al. 2022). It should be noted that the scant studies that exist showed biases, as
20 they focused on women and young people (Lang and Armstrong 2018a; Lee and Chow
21 2020; Lee Jung and Lee 2021), and there was a gap in the research on demographic
22 variables (Jain et al. 2022). Thus, the objective of this paper is to establish a profile of
23 individuals who are most likely to use FR, thereby considering personality traits and
24 demographic characteristics. This will allow effective market segmentation, while
25 verifying the dependence that exists between the consumer profile and the behaviors
26 associated with this CBM.
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34 35 **Method**

36 The analyzed information was collected in May 2022 through an online survey
37 conducted through the Qualtrics platform. It is important to emphasize that this was an
38 exploratory research in the sense that a convenience sample was taken, and no attempt
39 was made to generalize the findings to a larger population. The questionnaire was
40 disseminated through popular social networks like Instagram, Facebook, X, LinkedIn,
41 and WhatsApp in Spain. This type of data collection allowed to reach a wide and non-
42 probability sampling (Hair et al. 2017). By capturing the diversity of the respondents'
43 profile, non-probability samples could help to analyze emerging and innovative
44 phenomena like FR (Savelli et al. 2024). The study adopted the snowball sampling
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10 technique based on the initial use of researchers' social networks to establish contacts
11 and further create an increasing chain of participants. 353 surveys were answered, of
12 which 77.34% (N = 273) were valid for the study. Responses with missing values were
13 excluded from further data analysis. To reach the objectives of the study, descriptive
14 research with a quantitative approach was conducted.

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18 The items used in the questionnaire were based on those used in the specialized
19 literature² (Table 1). All items were measured on a 7-point Likert scale (from 1 =
20 *Strongly disagree* to 7 = *Strongly agree*). The socio-demographic items were measured
21 using categorical scales. The items were translated into Spanish, so a pre-test of the
22 questionnaire was conducted with 20 experts. The feedback was positive, since no
23 problems related to the comprehension of the items, the response scales or the structure
24 of the questionnaire were detected. Given the low rate of use of FR in Spain, the study
25 focused on clothing rental, without reference to shoes and accessories. The survey
26 included a brief explanation to make sure that all respondents understood the concept in
27 the same way³.

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35 INSERT TABLE 1

36 The data were analyzed using the IBM SPSS Statistics 26 software.

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38 In order to detect the possible existence of clearly differentiated groups of individuals
39 according to different variables shown on Table 1, a Cluster analysis was performed
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46 ² The items used for the measurement of personal traits, with the exception of environmental
47 awareness, are those that showed the greatest explanatory capacity in the scale validated in the
48 studies shown in Table 1.

49 ³ This is how it was also done in previous research, as shown in Jain et al. (2022) or Savelli et
50 al. (2024).
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10 using Ward's method and the squared Euclidean distance. Cluster analysis⁴ is a
11 multivariate technique to detect the existence of groups that were as similar as possible
12 and as different as possible in relation to the distribution of the variables analyzed (Hair
13 et al. 2010). This technique helped to classify individuals into the identified groups. The
14 variables taken into account were the intention to rent clothes and the intention to
15 replace the purchase of clothing with rental, as well as personal factors of the individual
16 such as their environmental awareness, the importance they give to price in their
17 purchasing decisions, their innovative nature, whether they were materialistic, being a
18 fashion leader, and the desire for uniqueness.

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25 After verifying the existence of different groups through Cluster analysis, we
26 established the sociodemographic profile of the individuals that make up each of the
27 groups detected. The corresponding comparisons were made using contingency tables⁵.
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29 Finally, the study explores the knowledge of those individuals who have previously
30 rented clothes. To this end, the existence of significant differences between the
31 sociodemographic variables used is determined.

32 **Results**

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36 The demographic characteristics of the sample analyzed are shown in Table 2.
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38 It should be noted that around 25% of the sample were men, which helped to reduce the
39 bias detected in previous studies. The greater presence of women could be explained by
40 the fact that, although they represent half of the population, they buy more than twice as
41 much fashion as the other 50%. They are one in two people, but they decide for
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47 ⁴ For further information see Conduct and Interpret a Cluster Analysis,

48 <https://www.statisticssolutions.com/free-resources/directory-of-statistical-analyses/cluster-analysis/>

49 ⁵ Statistical tool that allows to check the significance of differences between the variables
50 analyzed through an analysis of the adjusted residuals and the Chi-square test.

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10 everyone (couple and children). For the fashion sector, women are the main consumer
11 and the most important advisor (De Angelis and Suarez 2019).
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14 INSERT TABLE 2

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16 **Analysis and results**

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18 The Cluster analysis generated the results shown in Table 3. These results
19 obtained, presented in Table 3, provided evidence of the existence of two clearly
20 differentiated groups according to the aforementioned variables. Group 1 (“Linear”)
21 was the most numerous and included 65.93% of the sample (180 individuals), while
22 Group 2 (“Circular”) was formed by the remaining 34.07% (93 individuals).
23

24 As can be seen in Table 3, the means of the items show, at a significance level of 1%,
25 significant differences with respect to between the two groups detected in most of the
26 aspects analyzed. Only two of the items show equality between the means of the two
27 groups.
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32 The average assessments of the individuals of Linear Group (G1) were, in nearly all the
33 items used, statistically lower than those of the individuals of Circular Group (G2).
34 Therefore, there was evidence of a group of individuals [Circular Group (G2)], which,
35 although less numerous, seemed to have a greater intention to rent clothes in the near
36 future and a greater tendency to replace the purchase of clothing with rental (IR1 to
37 IR8). Moreover, individuals in Group 2 seemed to attach greater importance to price
38 when making their purchasing decisions (PC1), were more innovative in nature (I1) and
39 gave greater importance to having their own dressing style (U1), which conferred them
40 fashion leadership (FL1).
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48 Finally, no differences were perceived between the groups with respect to their self-
49 definition as responsible consumers (EC6) and their materialistic nature (M1).
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10 Individuals in both groups defined themselves as quite responsible towards their
11 environment (EC6), with average scores around 5 in both cases. It should be noted that
12 although Group 1 is called “Linear”, this does not imply that the individuals in this
13 group do not engage in circular consumption practices (see, for example, the
14 evaluations of EC5), but rather that they do so to a lesser extent than Group 2. Thus,
15 Despite this, Group 2 seemed to show a greater awareness of the effects of pollution on
16 the environment (EC1 and EC2); individuals in this group also stated that they
17 purchased more responsibly (EC3 and EC4) and were more likely to carry out
18 environmentally friendly actions (EC5). There were no differences between the detected
19 groups regarding their materialistic nature (M1), with both groups positioned near the
20 mid-point of the scale (3).

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30 As can be seen in Table 3, the means of the items show, at a significance level of 1%,
31 significant differences with respect to the two groups detected in most of the aspects
32 analyzed. Only two of the items show equality between the means of the two groups.

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34 After verifying the existence of these two groups, their sociodemographic profile was
35 analyzed by means of contingency tables, their profiles were analyzed according to the
36 socio-demographic characteristics. The corresponding comparisons were made using
37 contingency tables⁶. The categorical variables (Yes / No answer) “Have you ever
38 bought second-hand clothes?” and “I have prior experience with clothing rental” were
39 also included. The addition of these variables helped to analyze whether prior
40 participation in any of the redistribution models emerged as a distinctive behavior
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50 ⁶Statistical tool that allows, through an analysis of the adjusted residuals and the Chi-square
51 test, to check the significance of differences between the variables analyzed.
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10 between groups. Having previous experience with these models would help reduce the
11 perceived risks associated with CBMs. This perceived risk always acts as an important
12 inhibitor in consumer studies (Forsythe and Shi, 2003). Table 4 shows a summary of the
13 results obtained.
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17 INSERT TABLE 4

18 The results reflected in Table 4 show that the two groups (Linear G1 and Circular G2)
19 were very similar in terms of income level of the family unit, the labor situation or the
20 age of the respondent, as there were no significant differences between these variables.
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23 Thus, Circular Group (G2) was characterized by being mostly made up of female
24 (81.7%) individuals who had a university degree (35.2%). Furthermore, prior
25 experience in renting clothes and having ever bought second-hand clothes emerged as
26 really significant differentiating behaviors for Group 1. This group, on the other hand,
27 was made up of men (25.6%) with a high school degree (31.7%). These individuals had
28 no previous experience with clothing reuse models.
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31 After characterizing the two groups identified, and even though the percentage of
32 individuals who had prior experience with clothing rental was very low (8.1% of the
33 sample), the profile of these individuals was further examined. Table 5 shows their
34 demographic characteristics.
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39 INSERT TABLE 5

40 In order to determine whether there was a differentiated profile for people with no
41 previous rental experience, the corresponding analyses were carried out. The results
42 showed there were no significant differences in nearly all the analyzed socio-
43 demographic variables. It was only found that those who had prior experience in fashion
44 rental had also acquired second-hand clothes.
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Discussion

The intention of consumers to participate in the business models proposed within the framework of CE is essential to guarantee the viability of such models. Yet, this perspective has scarcely been addressed, as most of studies focus on the involvement of the supply-side (Arrigo 2021; Kirchherr Reike and Hekkert 2017). This gap in knowledge is even greater in the case of CBMs in the fashion sector (Ki, Park and Ha-Brookshire 2021). The linear economic models that reign in this industry mean that changes must be tackled both in terms of production and consumption. The great growth experienced by this industry in recent decades, in large part due to the fast-fashion movement, has made it one of the most polluting in the world. Therefore, in order to reach a sustainable development, a number of challenges must be taken on, associated mainly with the intensive use of resources, with the high fragmentation of the value chain, and with the high generation of waste by consumers (Hina et al. 2022; Ostermann et al. 2021; Vecchi 2020). Consequently, together with a technological revolution, a social revolution that modifies the current “throwaway” behavior of consumers is essential (Claxton and Kent 2020; Watson et al. 2018). Consumers must apply the principles of CE in their consumption behaviors, starting with reducing their consumption, then reusing the products they already own, and finally recycling those that have truly reached the end of their useful life. Consumers are a key driver of CBMs. Understanding consumer perceptions, motivations and behaviors in retail is critical to developing effective strategies to engage and incentivize individuals to participate in circular practices.

Among the business models proposed within the scope of CE, those related to the reuse of fashion are the most sustainable ([European Environment Agency 2024](#)). The fashion industry needs innovative business models that allow it to reduce its environmental

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10 footprint, for which PSSs offer numerous opportunities (Armstrong et al. 2015).
11 Consumer behaviors targeted at extending the useful life of clothing result in a decrease
12 not only in the quantity of new clothes that are manufactured but also in the quantity of
13 clothes that are disposed of as waste, most of which currently have no recycling option
14 (Colucci and Vecchi 2021). Close collaboration with consumers is therefore essential to
15 the development of PSSs (Rexfelt and Ornäs 2009). But are consumers truly willing to
16 reuse clothes, thereby extending their useful life? Is there a type of consumer who is
17 more likely to engage in this behavior? Despite the importance of these questions, these
18 aspects have barely been looked at (Jain et al. 2022; Musova et al. 2021), which clearly
19 explains the interest and novelty of this research focused on clothing rental.

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The PSS analyzed here, clothing rental, seemed to show a series of advantages related to sustainability (Colucci and Vecchi 2021; Johnson and Plepys 2021). Such advantages are related both to the design the supplier develop for the business and to the behavior of the consumer in the use of clothing rental. This emphasizes the importance to identify and analyze the factors that influence the decision of the consumers to use FR.

It should be pointed out that, even though the study of FR is growing, research is still scarce (Paramita 2023), so the results obtained here are relevant. Most of the existing studies focus on TPB. Thus, the factors that seem to influence the intention to use FR (attitude, behavioral control and social norms) might be affected by the individual's characteristics.

Yet, given the symbolic nature of clothes, the personal traits of individuals can constitute a major barrier to the development of FR. Having a better understanding of the consumers' profiles, especially those more likely to accept FR, might be helpful in informing and shaping sustainable business practices and in assisting FR providers in their attempts to attract new consumers.

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~~According to their personal characteristics, the results show that there are two different groups of individuals. The differences are primarily due to three personality traits that favor the intention to rent clothing in the short term. Thus, there are three main personal traits of a consumer that favor their intention to rent clothes in the short term, regardless of the type of article (luxury, event or daily). These traits are being a fashion leader, the need to be unique or and being environmentally aware. will help to establish different target segments for the FR providers.~~ However, the role that the price plays as a driver to use FR is a common factor to all of them. Clothing rental provides these individuals with a favorable way to cover these aspects because it lets them access a wide assortment of garments at a lower cost than that of purchase, thereby allowing them to follow the latest trends and show their originality. These results confirmed those obtained in previous studies (Becker-Leifhold 2018, Lang 2018, Lang and Armstrong 2108a, Lee and Chow 2020; Lee and Huang 2020; Tu and Hu 2018), clearly showing the moderating role of these variables regarding the intention to rent clothes.

Furthermore, these individuals seemed to show greater concern than others about the effects of environment pollution, and they purchased more responsibly (Lee and Chow 2020; Lee and Huang 2020). This fact is notable, given that previous research (Henninger and Singh 2017; Park and Armstrong 2019) showed that the environmental concerns of consumers did not always reflect in their purchasing behaviors (Roda 2024). Nevertheless, they did not consider themselves more socially responsible than the rest, or more materialistic.

~~The fact that they did not consider themselves to be materialistic could suggest that the absence of ownership did not represent a limitation to their participation in clothing rental. It let them focus on using the product, thereby providing emotional experiences derived from the opportunity to try a wide range of styles and trends (Armstrong et al.,~~

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11 ~~2015; Mukendi and Henninger 2020). This was a very important result, since giving up~~
12 ~~ownership is usually considered a barrier to PSSs based on use.~~

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14 It is also worth mentioning that these individuals showed a greater tendency to replace
15 the purchase of clothing with rental. This result should be highlighted, as it shows a
16 behavior that suggests participation in CE. It is a proxy for the rate at which linear
17 behavior is replaced by circular behavior. However, it is necessary to look more closely
18 at the reasons for this replacement. If an individual rents clothes very frequently and for
19 short periods of time, this behavior still involves the mass manufacturing of new
20 garments, consequently following a linear economic model.

21
22 ~~For FR to be circular, the clothes rented must be sustainable, made of quality and long~~
23 ~~lasting materials. The amount of rented clothes must be low and the rental periods long,~~
24 ~~i.e., FR must contribute to reducing the volume of newly manufactured clothes and~~
25 ~~these clothes must be slow fashion ones. Therefore, the reasons for this replacement~~
26 ~~behavior must be studied in depth, thereby determining if it is due to a sustainable~~
27 ~~behavior that is also related to reducing the use of different models of clothes.~~

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29 Regarding the demographic profile of these individuals who seem to be more willing to
30 rent clothes, the only differences found were related to gender and level of education.
31 While females did predominate in the sample, it is noteworthy that about 25% of the
32 sample was male. This reduced the bias found in other studies that have focused
33 exclusively on women (Lang and Armstrong 2018a; McNeill and Venter 2019;
34 Neerattiparambil and Shivkumar 2020). Thus, it was observed that women and
35 individuals with a higher level of education were more likely to rent clothes. This
36 corroborated the results of previous studies (Lang and Armstrong 2018; Lee and Chow
37 2020), highlighting the moderating role these variables played on clothing rental. No
38 differences related to age, income or occupation were evident, and the result pertaining
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10 to age led to an important line of research. In general, it seems that younger generations
11 show greater environmental awareness, which is transferred to their consumption styles
12 and lifestyles (Gazzola et al., 2020; Musova et al., 2021). However, these results could
13 be due to the fact that the majority of previous studies, focused on PSSs, have used
14 samples made up of young people (Jain and Mishra 2020; Mishra Jain and Jham 2020).
15 A broad range of ages was analyzed in this research, with no differences found between
16 them. Finally, the importance of prior experience with reuse PSSs should be pointed
17 out. As such, individuals who showed a greater inclination to rent were those who had
18 previous experience with these CBMs, meaning that they had already rented and
19 purchased second-hand clothes. Such prior experience probably represents one of the
20 main determinants of the intention to continue renting. This aspect therefore requires
21 more in-depth research to analyze its effects in samples consisting of individuals who
22 have already rented, although it is currently a problem, due to the low rate of use of
23 clothing rental. The scarcity of prior renting experience among the study's sample
24 reflected the true landscape of this industry in Spain, characterized by a notably limited
25 supply. The paper's contribution aims precisely to examine consumer intentions free
26 from the constraints of personal experience, rather than behaviors per se.

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38 This profile corresponds to the current one in the Spanish market. However, the
39 development of the fashion rental business in Spain is not high. The few companies that
40 are active in this field do it so through online platforms and for them rental is a
41 complement to their core business: selling clothes. Thus, in general, FR represents
42 around 5% of their revenue.

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46 The managers of CBMs need to know the viability of such models and whether or not
47 they create interest in consumers, and specifically in what type of consumers. Currently,
48 it seems that the clothing rental model must be initially targeted at female consumers
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10 who have a university degree, an innovative personality, who are interested in fashion
11 because they like to be leaders, and who have an innovative style, all without losing
12 sight of the price. Strategies should therefore be targeted at this segment of the
13 population, while highlighting the possibility of having access to a large number of
14 garments, without a major financial outlay. ~~This profile corresponds to the current one
15 in the Spanish market. However, the development of the fashion rental business in
16 Spain is not high. The few companies that are active in this field do it through online
17 platforms and for them rental is a complement to their core business: selling clothes.
18 Thus, in general, FR represents around 5% of their revenue. Clothing rental services
19 should offer a wide variety of clothing styles, brands and unique garments that can be
20 easily accessed to create an outfit. The consumer experience can be enhanced by
21 offering styling services, curated collections, and social media interactions. In addition,
22 given the importance of the price factor, subscription services should be offered. These
23 services should offer different numbers of garments per rental period, in order to match
24 consumers' wishes and budgets, which would enhance familiarity with the rental
25 service. Surprise boxes' of garments selected by the retailer could be also offered,
26 allowing access to different brands and/or designers. It is very important to
27 communicate the price and advantage of renting these garments as opposed to buying
28 them new, adding the costs of maintenance, repair and washing.
29 They could increase business by broadening the profile of potential consumers,
30 including young men.~~

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44 At the same time, communication strategies should highlight the environmental benefits
45 derived from the process followed in this business model. And while the sustainable
46 manufacturing of clothes should be one of the most important attributes, in this case the
47 benefits of extended useful life should also be emphasized. Communication strategies
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10 should also focus on how FR can reduce resource depletion, environmental pollution
11 and textile waste. This message is more credible to consumers, who are often skeptical
12 about the sustainability affirmations made by large enterprises (Fisher et al., 2008).
13 Emphasizing the benefits related to “sustainable” manufacturing processes is less
14 visible for consumers, who also tend to associate such benefits with a higher price (Hina
15 et al., 2022). It is easier for consumers to perceive the benefits of extending the life
16 cycle of clothes, which would mean promoting the use of emotional messages that make
17 them feel good about participating in this process. This task will be easier if, as it is
18 evidenced in this work, rental is able to satisfy the emotional needs of individuals linked
19 to clothing. Theyse companies could increase business by broadening the profile of
20 potential consumers, including young men.

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28 The importance of the study is even greater if we consider the cultural environment
29 where this research has been conducted, since there are very few studies in Spain
30 (Abbate et al., 2023). This helps to expand literature beyond its focus on other contexts.
31 The results obtained showed a low use of this type of business model in Spain (under
32 10%), in line with global averages (Thredup 2022). However, this market is expected to
33 grow strongly in the upcoming years (Market Data Forecast 2024).
34 It is noteworthy that previous research mainly focused on samples composed solely of
35 women and/or students. This study includes a broader profile of potential consumers, so
36 it is a significant contribution to the existing body of literature, offering a broader
37 perspective and enhancing our understanding of the subject matter.

Conclusion

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44 FR seemed to show a series of advantages related to sustainability (Colucci and Vecchi
45 2021; Johnson and Plepys 2021). Such advantages are related both to the design the
46 supplier develops for the business and to the consumer’s behavior in using this service
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(Amasawa et al. 2023; Monticelli and Costamagna 2022). Thus, clothing rental companies should invest in high quality and durable garments that extend their useful life, and intensify their use as well as in developing operational practices, such as cleaning methods, shipping and return systems, and final disposal of garments that prioritize sustainability. They can also develop strategies to educate consumers about more conscious and sustainable consumption. These consumers must be willing to accept such changes in their behavior. This emphasizes the importance of identifying and analyzing the factors that influence the decision of the consumers to use FR. It should be pointed out that, even though the study of FR is growing, research is still scarce (Paramita 2023), so the results obtained here are relevant. Most of the existing studies focus on TPB. Thus, the factors that seem to influence the intention to use FR (attitude, behavioral control and social norms) might be affected by the individual's characteristics. However, these studies must be complemented with the theory of personality traits. This theory perspective suggests that people have certain characteristics, which influence their lifestyle and consumption patterns. Yet, given the symbolic nature of clothes, the personal traits of individuals can constitute a major barrier to the development of FR. Having a better understanding of the consumers' profiles, especially those more likely to accept FR, might be helpful in informing and shaping sustainable business practices and in assisting FR providers in their attempts to attract new consumers. The results obtained show that these traits are: being a fashion leader, the need to be unique, and being environmentally aware. It is noteworthy that not owning the property of clothing does not seem to be a limitation to participate in FR, given the null effect exerted by the materialism trait. This result emerges as a future line of research, proposing a greater number of

Commented [u1]: ¿Esto no sería una consecuencia? Es decir, **como** los factores que parecen influir en la intención de usar FR pueden estar afectados por las características particulares del individuo, **entonces** es necesario complementar los estudios con la teoría de los rasgos personales. Tal y como está escrito, dice que "los factores que parecen influir en la intención de usar FR pueden estar afectados por las características particulares del individuo PERO es necesario complementar los estudios con la teoría de los rasgos personales".

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indicators of this concept. The fact that they did not consider themselves to be materialistic could suggest that the absence of ownership did not represent a limitation to their participation in clothing rental. It let them focus on using the product, thereby providing emotional experiences derived from the opportunity to try a wide range of styles and trends (Armstrong et al., 2015; Mukendi and Henninger 2020). This was a very important result, since giving up ownership is usually considered a barrier to PSSs based on use.

References:

Abbate, Stefano, Piera Centobelli, Roberto Cerchione, Simon P., Nadeem, and Emanuela Riccio. 2023. "Sustainability trends and gaps in the textile, apparel and fashion industries." *Environment, Development and Sustainability*. doi:10.1007/s10668-022-02887-2

Achabou, Mohamed A. and Sihem Dekhili. 2013. "Luxury and sustainable development: is there a match?." *Journal of Business Research* 66 (10): 1896-1903. doi:10.1016/j.jbusres.2013.02.011

Aguiar, Andreza, Jeniffer Nadae and Renato da Silva Lima. 2023. "Consumer perceptions and actions related to circular fashion items: Perspectives of young Brazilians on circular economy." *Waste Management & Research* 41(2): 350-367. doi:10.1177/0734242X221122571

Amasawa, Eri., Brydges, Taylor., Henninger, Claudia and Kimita, Koji 2023. "Can rental platforms contribute to more sustainable fashion consumption? Evidence from a mixed-method study."-. *Cleaner and Responsible Consumption* 8: 100103. doi: 10.1016/j.clrc.2023.100103

Armstrong, Cosette M., Kirsi Niinimäki, Sari Kujala, Essi Karell, and Chunmin Lang. 2015. "Sustainable product-service systems for clothing: exploring consumer perceptions

1
2
3
4
5
6
7
8
9
10
11 of consumption alternatives in Finland.” *Journal of Cleaner Production* 97: 30-39.

12 [doi:10.1016/j.jclepro.2014.01.046](https://doi.org/10.1016/j.jclepro.2014.01.046)

13
14 Armstrong, Cosette M., Kirsi Niinimäki, Chunmin Lang, and Sari Kujala. 2016. “A Use-
15 Oriented Clothing Economy? Preliminary Affirmation for Sustainable Clothing
16 Consumption Alternatives.” *Sustainable Development* 24: 18–31. doi:10.1002/sd.1602

17
18 Arrigo, Elisa 2021. “Collaborative consumption in the fashion industry: A systematic
19 literature review and conceptual framework.” *Journal of Cleaner Production* 325(20):
20 129261. doi:10.1016/j.jclepro.2021.129261

21
22 Arrigo, Elisa 2023. “Fashion rental as a new and innovative channel alongside fashion
23 retail”, *Sinergie Italian Journal of Management* 41(1): 127-145. doi:
24 10.7433/s120.2023.07,

25
26 Awan, Usama and Robert Sroufe. 2022. “Sustainability in the Circular Economy: Insights
27 and Dynamics of Designing Circular Business Models.” *Applied Science* 12: 1521.
28 doi:10.3390/app12031521

29
30 Ajzen, Icek. 1991. “The theory of planned behavior.” *Organizational Behavior and*
31 *Human Decision Processes* 50 (2) :179–211. doi:10.1016/0749-5978(91)90020-T

32
33 Baek, Eunsoo and Ga-Eun Oh. 2021. “Diverse values of fashion rental service and
34 contamination concern.” *Journal of Business Research* 123: 165-175.
35 doi:10.1016/j.jbusres.2020.09.061

36
37 Becker-Leifhold, Carolin V. 2018. “The role of values in collaborative fashion
38 consumption - A critical investigation through the lenses of the theory of planned
39 behavior.” *Journal of Cleaner Production* 199: 781-791.
40 doi:10.1016/j.jclepro.2018.06.296

41
42 [Blas, Silvia., Codina, Mónica and Sádaba, Teresa. 2022. “Does Sustainability Matter to
43 Fashion Consumers? Clustering Fashion Consumers and Their Purchasing Behavior in
44
45
46
47
48
49
50
51
52
53
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42
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44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

Spain.” *Fashion Practice: The Journal of Design, Creative Process & The Fashion Industry*, 15(1): 36-63. doi: 10.1080/17569370.2022.2051297

[Blas, Silvia., Lavanga, Mariangela and Codina, Mónica. 2023. “Drivers and barriers for sustainable fashion consumption in Spain: a comparison between sustainable and non-sustainable consumers.” *International Journal of Fashion Design, Technology and Education*, 16\(1\): 1-13. doi: 10.1080/17543266.2022.2089239](#)

Centobelli Piera, Roberto Cerchione, Davide Chiaroni, Pasquale Del Vecchio, and Urbinati, Andrea, 2020. “Designing business models in circular economy: A systematic literature review and research agenda.” *Business Strategy and the Environment* 29: 1734–1749. doi:10.1002/bse.2466

Ceschin, Fabrizio and Idil Gaziuluso. 2016. “Evolution of design for sustainability: From product design to design for system innovations and transitions.” *Design Studies* 47: 118-163. doi:10.1016/j.destud.2016.09.002

Chan, Hau-Ling, Xiaoyong Wei, Shu Guo, and Wing-Hong Leung. 2020. “Corporate social responsibility (CSR) in fashion supply chains: A multi-methodological study.” *Transportation Research Part E: Logistics and Transportation Review* 142: 102063. doi:10.1016/j.tre.2020.102063

Cherry, Catherine E. and Nick F. Pidgeon. 2018. “Why is ownership an issue? Exploring factors that determine public acceptance of product-service systems.” *Sustainability* 10 (7): 1-15, 2289. doi:10.3390/su10072289

Claxton, Stella and Anthony Kent, 2020. “The management of sustainable fashion design strategies: an analysis of the designer’s role.” *Journal of Cleaner Production* 268: 122112. doi:10.1016/j.jclepro.2020.122112

1
2
3
4
5
6
7
8
9
10 Colucci, Mariachiara and Alessandra Vecchi, 2021. "Close the loop: Evidence on the
11 implementation of the circular economy from the Italian fashion industry." *Business*
12 *Strategy Environment* 30: 856–873. doi:10.1002/bse.2658

13
14
15 Costa, P.T. and McCrae, R.R. 1992. "Revised NEO Personality Inventory (NEO-PI-R)
16 and NEO Five-Factor Inventory (NEO-FFI) professional manual." *Psychological*
17 *Assessment Resources* 396

18
19
20 De Angelis, Roberta. 2022. "Circular economy business models as resilient complex
21 adaptive systems." *Business Strategy and the Environment* 31(5): 2245-2255.
22 doi:10.1002/bse.3019

23
24
25 De Angelis, Cristian and Carmen Suarez. 2019. "Mujer el Centro de la Moda", available
26 at <https://www.modaes.com/entorno/mujer-el-centro-de-la-moda> (accessed 5 september
27 2022).

28
29
30 Dissanayake, D. G. Kanchana and Dakshita Weerasinghe. 2021. "Towards Circular
31 Economy in Fashion: Review of Strategies, Barriers and Enablers." *Circular Economy*
32 *and Sustainability* 2: 25-45. doi:10.1007/s43615-021-00090-5

33
34
35 Ellen MacArthur Foundation. 2017. *Fashion and the Circular Economy*, available at
36 <https://www.ellenmacarthurfoundation.org/explore/fashion-and-the-circulareconomy>
37 (accessed 20 december 2022).

38
39
40 European Environment Agency. 2024. *Management of used and waste textiles in*
41 *Europe's circular economy*, available at

42 <https://www.eea.europa.eu/publications/management-of-used-and-waste-textiles>
43 (accessed 16 october 2024).

44
45
46 European Parliament News. 2022. *El impacto de la producción textil y de los residuos en*
47 *el medio ambiente (infografía)* available at
48 <https://www.europarl.europa.eu/news/es/headlines/society/20201208STO93327/el->
49

1
2
3
4
5
6
7
8
9
10 [impacto-de-la-produccion-textil-y-de-los-residuos-en-el-medio-ambiente \(accessed 28](#)
11 [November 2022\).](#)

12
13 Fani, Virginia, Fabiana Pirola, Bianca Bindi, Romeo Bandinelli, and Giuditta Pezzotta.
14 2022. "Design Product-Service Systems by Using a Hybrid Approach: The Fashion
15 Renting Business Model." *Sustainability* 14: 5207. doi:10.3390/su14095207

16
17 Fernandes, Sânia D. C, Daniela C. Pigosso, Tim C. McAloone, and Henrique Rozenfeld.
18 2020. "Towards product-service system oriented to circular economy: A systematic
19 review of value proposition design approaches." *Journal of Cleaner Production* 257:
20 120507. doi:10.1016/j.jclepro.2020.120507

21
22 Fishbein, Martin and Icek Ajzen. 1977. "Belief, Attitude, Intention, and Behavior: An
23 Introduction to Theory and Research." *Contemporary Sociology* 10: 130-132.
24 Doi:10.2307/2065853

25
26 Fisher, Tom, Tim Cooper, Sophie Woodward, Alex. Hiller, and Helen Goworek. 2008.
27 *Public Understanding of Sustainable Clothing: Report to the Department for*
28 *Environment, Food, and Rural Affairs*. DEFRA, London, available at
29 [https://www.researchgate.net/publication/313479526_Public_Understanding_of_Sustai](https://www.researchgate.net/publication/313479526_Public_Understanding_of_Sustainable_Clothing_Report_to_the_Department_for_Environment_Food_and_Rural_Affairs#fullTextFileContent)
30 [nable_Clothing_Report_to_the_Department_for_Environment_Food_and_Rural_Affair](https://www.researchgate.net/publication/313479526_Public_Understanding_of_Sustainable_Clothing_Report_to_the_Department_for_Environment_Food_and_Rural_Affairs#fullTextFileContent)
31 [s#fullTextFileContent](https://www.researchgate.net/publication/313479526_Public_Understanding_of_Sustainable_Clothing_Report_to_the_Department_for_Environment_Food_and_Rural_Affairs#fullTextFileContent)

32
33 Forsythe, Sandra.M. and Shi, Bo. 2003. "Consumer paronage and risks perceptions in
34 internet shopping." *Journal of Business Research* 56: 867-875. doi: 10.1016/S0148-
35 2963(01)00273-9

36
37 Gam, Hae J. 2011. "Are fashion-conscious consumers more likely to adopt eco-friendly
38 clothing?." *Journal of Fashion Marketing and Management* 15(2): 178-193.
39 doi:10.1108/13612021111132627

1
2
3
4
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57
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59
60

García-Quevedo, José, Elisensa Jové-Llopis and Ester Martínez-Ros. 2020. "Barriers to the circular economy in European small and medium-sized firms." *Business Strategy and the Environment* 29(6): 2450–2464.

Gazzola, Patrizia, Enrica Pavione, Roberta Pezzetti, and Daniele Grechi. 2020. "Trends in the Fashion Industry. The Perception of Sustainability and Circular Economy: A Gender/Generation Quantitative Approach." *Sustainability* 12(7): 2809.
doi:10.3390/su12072809

Grazzini, Laura, Diletta Acuti, and Gaetano Aiello. 2021. "Solving the puzzle of sustainable fashion consumption: The role of consumers' implicit attitudes and perceived warmth." *Journal of Cleaner Production* 287: 125579.
doi:10.1016/j.jclepro.2020.125579

Grebosz-Krawczyk, Magdalena and Dagna Siuda. 2019. "Attitudes of young European consumers toward recycling campaigns of textile companies." *Autex Research Journal* 19: 394–399. doi: 10.1515/aut-2018-0057

Hair, Joseph F., Black, Willian., Babin, Barry.J and Rolph E. Anderson. 2010. *Multivariate Data Analysis*, (7th Ed.) Pearson, New York, NY.

Hair, Joseph F., Matthews, Lucy., Matthews,, Ryan and Marko Sarstedt 2017. PLS-SEM or CB-SEM: updated guidelines on which method to use, *International Journal of Multivariate Data Analysis*, 1(2): 107-123. doi: [10.1504/IJMDA.2017.087624](https://doi.org/10.1504/IJMDA.2017.087624)

Haws, Kelly L., Karen P. Winterich and Rebecca W. Naylor. 2014. "Seeing the world through green-tinted glasses: Green consumption values and responses to environmentally friendly products." *Journal of Consumer Psychology* 24(3): 336–354.
doi:10.1016/j.jcps.2013.11.002

1
2
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53
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55
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57
58
59
60

[Henninger, Claudia E. and Pallavi Singh. 2017. "Ethical Consumption Patterns and the Link to Purchasing Sustainable Fashion." *Sustainability in Fashion* 103-261. doi: 10.1007/978-3-583-319-51253-2_6](#)

Hellström, Daniel and John Olson. 2024. "Let's go thrift shopping: Exploring circular business model innovation in fashion retail", *Technological Forecasting & Social Exchange*, 198:123000. doi: 10.1016/j.techfore.2023.123000

Hina, Maryam, Chetna Chauhan, Puneet Kaur, Sascha Kraus, and Amandeep Dhir. 2022. "Drivers and barriers of circular economy business models: Where we are now, and where we are heading." *Journal of Cleaner Production* 333: 130049. doi:10.1016/j.jclepro.2021.130049

Honic, Meliha, Iva Kovacic, Philipp Aschenbrenner, and Arne Ragossnig. 2021. "Material passports for the end-of-life stage of buildings: challenges and potentials." *Journal of Cleaner Production* 319: 128702. doi:10.1016/j.jclepro.2021.128702

Iran, Samira and Ulf Schrader. 2017. "Collaborative fashion consumption and its environmental effects." *Journal of Fashion Marketing and Management: An International Journal* 21(4): 468-482. doi:10.1108/JFMM-09-2016-0086

Jain, Ritu, Kokil Jain, Abhishek Behl, Vijay Pereira, Manlio Del Giudice, and Demetris Vrontis. 2022. "Mainstreaming fashion rental consumption: A systematic and thematic review of literature." *Journal of Business Research* 139: 1525-1539. doi:10.1016/j.jbusres.2021.10.071

Jain, Sheetal and Sita Mishra. 2020. "Luxury fashion consumption in sharing economy: a study of Indian millennials." *Journal of Global Fashion Marketing* 11(2): 171-189. doi:10.1080/20932685.2019.1709097.

Jain, Ritu., Jain, Kokil., Behl, Abhishek., Pereira, Vijay., Del Giudice, Manlio and Vrontis, Demetris. 2022. "Mainstreaming fashion rental consumption: A systematic and

1
2
3
4
5
6
7
8
9
10 thematic review of literature”, *Journal of Business Research* 139(C): 1525-1539. doi:
11 10.1016/j.jbusres.2021.10.071

12
13 Johnson, Emma and Andrius Plepys. 2021. “Product-Service Systems and
14 Sustainability: Analysing the Environmental Impacts of Rental Clothing.” *Sustainability*
15 13: 2118. doi:10.3390/su13042118

16
17 Jones, Geoffrey and Shelly Yu. 2021. *Can fabric waste become fashion’s resource?*
18 available at <https://hbswk.hbs.edu/item/can-fabric-waste-become-fashions-resource>
19 (accessed 29 November 2022).

20
21 Kang, Jiyun and Haesun Park-Poaps. 2010. “Hedonic and utilitarian shopping
22 motivations of fashion leadership.” *Journal of Fashion Marketing and Management*
23 14(2): 312–328. doi:10.1108/13612021011046138

24
25 Ki, Chung-Wha, Sze-Man Chong, and Jung E. Ha-Brookshire. 2020. “How fashion can
26 achieve sustainable development through a circular economy and stakeholder
27 engagement: A systematic literature review.” *Corporate Social Responsibility and*
28 *Environmental Management* 27: 2401–2424. doi:10.1002/csr.1970

29
30 Ki, Chung-Wha, Sangsoo Park, and Jung E. Ha-Brookshire. 2021. “Toward a circular
31 economy: Understanding consumers’ moral stance on corporations’ and individuals’
32 responsibilities in creating a circular fashion economy.” *Business Strategy and the*
33 *Environment* 30(2): 121–1135. doi:10.1002/bse.2675

34
35 Kirchherr, Julian, Denise Reike, and Marko Hekkert. 2017. “Conceptualizing the
36 circular economy: An analysis of 114 definitions.” *Resources, Conservation &*
37 *Recycling* 127: 221–232. doi:10.1016/j.resconrec.2017.09.005

38
39 Klepp, Ingun Grimstad, Laitala, Kirsi and Wiedemann, Stephen. 2020, “Clothing
40 Lifespans: What Should Be Measured and How”, *Sustainability* 12(15), 6219,
41 doi:10.3390/su12156219
42
43
44
45
46
47
48
49
50
51
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41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60
- Lakatos, Elena S., Lucian-Ionel Cioca, Viorel Dan, Alina O. Ciomos, Oana A. Crisan, and Ghita Barsan. 2018. "Production, Consumption and Waste Generation in Line with Circular Economy in Romania." *Sustainability* 10(3): 865. doi:10.3390/su10030865
- Lang, Chunmin. 2018. "Perceived risks and enjoyment of access-based consumption: identifying barriers and motivations to fashion renting." *Fashion and Textiles* 5:23. doi:10.1186/s40691-018-0139-z
- Lang, Chunmin and Zhang, Ruirui. 2024. "Motivators of circular fashion: The antecedents of Chinese consumers' fashion renting intentions", *Sustainability* 16, 2184. doi: 10.3390/su16052184
- [Lang, Chunmin and Cosette M. J. Armstrong. 2016. "Personal attributes: influences on clothing disposal reasons and frequency.", *Journal of Family & Consumer Sciences*, 108\(3\): 41-47. doi:10.14307/JFCS108.3.41](#)
- Lang, Chunmin and Cosette M. J. Armstrong. 2018a. "Collaborative consumption: The influence of fashion leadership, need for uniqueness, and materialism on female consumers' adoption of clothing renting and swapping." *Sustainable Production and Consumption* 13: 37–47. doi:10.1016/J.SPC.2017.11.005
- Lang, Chunmin and Cosette M. J. Armstrong. 2018b. "Fashion leadership and intention toward clothing product-service retail models." *Journal of Fashion Marketing and Management* 22(4): 571–587. doi:10.1108/JFMM-12-2017-0142
- Lang, Chunmin, Sukyung Seo, and Chuanlan Liu. 2019. "Motivations and obstacles for fashion renting: A cross-cultural comparison." *Journal of Fashion Marketing and Management* 23(4): 519–536. doi:10.1108/JFMM-05-2019-0106
- Lee, Stacy H. and Pui-Sze Chow. 2020. "Investigating consumer attitudes and intentions toward online fashion renting retailing." *Journal of Retailing and Consumer Services* 52: 101892. doi:10.1016/j.jretconser.2019.101892

1
2
3
4
5
6
7
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44
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51
52
53
54
55
56
57
58
59
60

Lee, Stacy H. and Ran Huang. 2020. "Exploring the Motives for Online Fashion Renting: Insights from Social Retailing to Sustainability." *Sustainability* 12: 7610. doi:10.3390/su12187610

Lee, Sae E., Hye J. Jung, and Kyu-Hye Lee. 2021. "Motivating collaborative consumption in fashion: Consumer benefits, perceived risks, service trust, and usage intention of online fashion rental services." *Sustainability* 13(4): 1–20. doi:10.3390/su13041804

Liu, Jucun Y. S., Tony Tong, and Joseph Sinfield. 2021. "Toward a resilient complex adaptive system view of business models." *Long Range Planning* 54: 102030. doi:10.1016/j.lrp.2020.102030

Market Data Forecast. 2024. Global online clothing rental market research report 2024. available at <https://www.marketdataforecast.com/market-reports/online-clothing-rental-market> (accessed on 16 July 2024).

McNeill, Lisa and Brittany Venter. 2019. "Identity, self-concept and young women's engagement with collaborative, sustainable fashion consumption models." *International Journal of Consumer Studies* 43(2): 368–378. doi:10.1111/ijcs.12516

Mishra, Sita, Sheetal Jain, and Gunjan Malhotra. 2021. "The anatomy of circular economy transition in the fashion industry." *Social Responsibility Journal* 17: 524–542. doi:10.1108/SRJ-06-2019-0216

Mishra, Sita, Sheetal Jain, and Vimi Jham. 2020. "Luxury rental purchase intention among millennials—a cross-national study." *Thunderbird International Business Review*. doi:10.1002/tie.22174.

1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
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[Moda.es 2023. "Informe Económico de la Moda en España 2023", available at https://www.modaes.com/files/publicaciones/free/2023/informe-economico-2023/#page=119 \(accessed on 16 October 2024\).](https://www.modaes.com/files/publicaciones/free/2023/informe-economico-2023/#page=119)

Moeller, Sabine and Kristina Wittkowski, 2010. "The burdens of ownership: Reasons for preferring renting." *Managing Service Quality: An International Journal* 20(2): 176–191. doi:10.1108/09604521011027598

Mohr, Lois A., Deborah J. Web, and Katherine E. Harris. 2001. "Do consumers expect companies to be socially responsible?. The impact of corporate social responsibility on buying behaviour." *The Journal of Consumer Affairs* 35(1): 5–71. doi:10.1111/j.1745-6606.2001.tb00102.x

Monticelli, Anna and Mattia Costamagna. 2022. "Environmental assessment of the rental business model: A case study for formal wear. Environment." *Development and Sustainability* 25: 7625–7643. doi:10.1007/s10668-022-02363-x

[Mukendi, Amira and Claudia E. Henninger, 2020. "Exploring the spectrum of fashion rental." *Journal of Fashion Marketing and Management: An International Journal* 24: 455–469. doi:10.1108/JFMM-08-2019-0178](#)

Musova, Zdenka, Hussam Musa, Jennifer Drugdova, George LazaroIU, and Jehad Alayasa. 2021. "Consumer Attitudes Towards New Circular Models in the Fashion Industry." *Journal of Competitiveness* 13(3): 111–128. doi: 10.7441/joc.2021.03.07

[Myin, Mon Thu., Su, Jim., Wu, Huicheng \(Jeff\) and Shen, Haina. 2023. "Investigating the determinants of using clothing subscription rental services: a perspective from Chinese young consumers." *Young Consumers*, 24\(1\): 95-113. doi: 10.1108/YC-06-2022-1547](#)

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Neerattiparambil, Naeema N. and Belli M. Shivkumar. 2020. "Why Rent a Dress ?: A Study on Renting Intention for Fashion Clothing Products." *Indian Journal of Marketing* 50(2). doi:10.17010/ijom/2020/v50/i2/150439

~~European Parliament News. 2022. *El impacto de la producción textil y de los residuos en el medio ambiente (infografía)* available at <https://www.europarl.europa.eu/news/es/headlines/society/20201208STO93327/el-impacto-de-la-produccion-textil-y-de-los-residuos-en-el-medio-ambiente> (accessed 28 November 2022).~~

Nußholz, Julia L. 2017. "Circular business models: Defining a concept and framing an emerging research field." *Sustainability* 9(10): 1810. doi:10.3390/su9101810

United Nations. 2015. *Agenda 2030*, available at <https://www.un.org/sustainabledevelopment/es/2015/09/la-asamblea-general-adopta-la-agenda-2030-para-el-desarrollo-sostenible/> (accessed 26 November 2022).

Ostermann, Cristina M., Leandro d.S. Nascimento, Fernanda K. Steinbruch, and Daniela Callegaro-de-Menezes. 2021. "Drivers to implement the circular economy in born-sustainable business models: a case study in the fashion industry." *Revista de Gestão* 28(3): 223-240. doi:10.1108/REG-03-2020-0017

Pal, Rudrajeet, Bin Shen, and Erik Sandberg. 2019. "Circular fashion supply chain management: exploring impediments and prescribing future research agenda." *Journal of Fashion Marketing and Management* 23(3): 298-307. doi:10.1108/JFMM-07-2019-166

Paramita, Dhyana. 2023. "Sustainable fashion from product service system perspective: A literature review." *J@Ti Undip: Jurnal Teknik Industri* 1(1): 33-41. doi:10.14710/jati.1.1.33-41

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60

Rexfelt, Oskar and Viktor H. Ornäs, 2009. "Consumer acceptance of product-service systems." *Journal of Manufacturing Technology Management* 20(5): 674-699. doi:10.1108/17410380910961055

Riba, Jordi-Roger, Rosa Cantero, Trini Canals, and Rita Puig. 2020. "Circular economy of post-consumer textile waste: Classification through infrared spectroscopy." *Journal of Cleaner Production* 272: 1 23011. doi:0.1016/j.jclepro.2020.123011

Richins, Marsha L. 2004. "The material values scale: measurement properties and development of a short form." *Journal of Consumer Research* 31(1): 209-219. doi:10.1086/383436

Roda, Lorena. 2024. "Overcoming barriers for sustainable fashion: bridging attitude-behaviour gap in retail." *International Journal of Retail & Distribution Management*, 52(1), 44-61. doi: 10.1108/IJRDM-02-2023-0056

Sauermann, Henry, Katrin Vohland, Vyron Antoniou, Báltin Balazs, Claudia Gobel, Kostas Karatzas, Peter Mooney, Josep Perello, Marisa Ponti, Roeland Samson, and Silvia Winter. 2020. "Citizen science and sustainability transitions." *Research Policy* 49: 103978. doi:10. 1016/j. respol. 2020. 103978

Savelli, Elisabetta., Francioni, Barbara., Curina, Ilaria and Marco Cioppi. 2024. "Promoting access-based consumption practices through fashion renting: evidence from Italy." *Journal of Consumer Marketing*, 41(1): 61-77. doi: 10.1108/JCM-02-2023-5843

Schaefers, Tobias, Stephanie J. Lawson, and Monika Kukar-Kinney. 2016. "How the burdens of ownership promote consumer usage of access-based services." *Marketing Letter*, 27(3): 269-577. doi:10.1007/s11002-015-9366-x

Thredup. 2022. *Resale Report*, available at <https://www.thredup.com/resale/static/2022-resaleReport-full-92a77020598ceca50f43227326100cc2.pdf> (accessed 15 March 2023)

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54
55
56
57
58
59
60

Tian, Kelly T., William O. Bearden, and Gary L. Hunter. 2001. "Consumers' need for uniqueness: scale development and validation." *Journal of Consumer Research* 28(1): 50-66. doi:10.1086/321947

Tu, Jui-Che and Chi-Ling Hu. 2018. "A Study on the Factors Affecting Consumers' Willingness to Accept Clothing Rentals." *Sustainability* 10: 4139. doi:10.3390/su10114139

Tukker, Arno. 2015. "Product services for a resource-efficient and circular economy—A review." *Journal of Cleaner Production* 97: 76-91. doi:10.1016/j.jclepro.2013.11.049

Tunn, Vivian S. C., Ellis A., Van den Hende, Nancy M .P. Bocken, and Jan P. L. Schoormans. 2021. "Consumer adoption of access-based product-service systems: The influence of duration of use and type of product." *Business Strategy and the Environment* 30(6): 2796-2813. doi:10.1002/bse.2894

Vecchi, Alessandra. 2020. "The circular fashion framework-the implementation of the circular economy by the fashion industry." *Current Trends in Fashion Technology & Textile Engineering* 6(2): 31–35. doi:10.19080/CTFTTE.2020.06.555681

Velenturf, Anne P. and Philp Purnell. 2021. "Principles for a sustainable circular economy." *Sustainable Production and Consumption* 27: 1437-1457. doi:10.1016/j.spc.2021.02.018

Watson, David, Ane K. Aare, Steffen Trzepacz, and Christine D. Petersen. 2018. *Used Textile Collection in European Cities. Study commissioned by Rijkswaterstaat under the European Clothing Action Plan (ECAP)*. available at http://www.ecap.eu.com/wp-content/uploads/2018/07/ECAP-Textile-collection-in-European-cities_full-report_with-summary.pdf

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2
3
4
5
6
7
8
9
10
11 Workman, Jane E. and Laura K. Kidd. 2000. "Use of the need for uniqueness scale to
12 characterize fashion consumer groups." *Clothing and Textiles Research Journal* 18 (4):
13 227–236. doi:10.1177/0887302X0001800402

14
15 Xu, Jun., Zhou, Yun., Jiang, Lei and Shen, Lei. 2022. "Exploring sustainable fashion
16 consumption behavior in the post-pandemic era: changes in the antecedents of second-
17 hand clothing in China." *Sustainability*, 14(15): 9566. doi: 10.3390/su14159566

18
19 Yang, Miying, Palie Smart, Mukesh Kumar, Mark Jolly, and Steve Evans. 2018.
20 "Product-service systems business models for circular supply chains." *Production*
21 *Planning and Control* 29 (6): 498-508. doi:10.1080/09537287.2018.1449247.

22
23 Zhu, Xiaoxi. and Kai Liu. 2021. "A systematic review and future directions of the
24 sharing economy: business models, operational insights and environment-based utilities."
25 *Journal of Cleaner Production* 290: 125209. doi:10.1016/j.jclepro.2020.125209
26
27
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Table 1 Variables under study.

Variable	Item	Authors
Intention to Rent	IR1: I will probably use the clothing rental service soon	Baek and Oh (2021), Lang et al. (2019), Tu and Hu (2018)
	IR2: I would be willing to recommend the clothing rental service to my friends	
	IR3: I'm willing to use the clothing rental service in the upcoming year	
	IR4: I'm willing to rent everyday clothes over the next 12 months	
	IR5: I'm willing to rent clothes for an event in the upcoming year	
	IR6: I'm willing to rent luxury clothing in the upcoming year	
	IR7: I will try to replace the purchase of clothing with the rental of clothing	
	IR8: In the future, I will rent clothing instead of buying it	
Environmentally conscious	EC1: The effects of pollution on health are worse than we think	Gam (2011), Lee and Huang (2020)
	EC2: Pollution is responsible for climate change	
	EC3: It is important that the products I use do not harm the environment	
	EC4: My concern for the environment affects my purchasing habits	
	EC5: I am willing to be inconvenienced by taking actions that are more environmentally friendly	

Variable	Item	Authors
	EC6: I am an environmentally responsible person	
Materialism	M1: I am a materialistic person	Lang and
Fashion leader	FL1: I am the first to try something new in fashion, and therefore many people consider me a leader	Armstrong (2018a; 2018b)
Uniqueness	U1: I usually look for clothes that let me create my own style	Lang and Armstrong (2018a)
Price consciousness	PC1: I like to look for (and find) the best prices	Lang (2018)
Personal Innovativeness	I1: I like to try new things	Tu and Hu (2018)

Table 2. Sample Characteristics.

Sex	Level of studies		
Male	23.5%	Basic	1.9%
Female	76.5%	High school school	29.3%
Net monthly income of the family unit	University graduate		68.8%
Under €1,500	19.9%	Employment-situation Laboral Situation	
€1,500 – €3,000	46.2%	Employee	62.0%
Over €3,000	33.8%	Self-employed	8.6%
Age	Unemployed		4.9%
18-35	32.33%	Student	15.0%
36-50	32.71%	Retired/Pensioner/Disabled	6.4%
Over 50	34.96%	Domestic work	3.0%
Prior rental experience	8.1%		

Table 3. Cluster Analysis Results.

	Group 1 (N = 180)	Group 2 (N = 93)	F	p
IR1: I will probably use the clothing rental service soon	1.84	4.31	<u>20.397</u>	<u>0.000***</u>
IR2: I would be willing to recommend the clothing rental service to my friends	2.69	5.09	<u>7.018</u>	<u>0.000***</u>
IR3: I'm willing to use the clothing rental service in the upcoming year	1.93	5.04	<u>1.137</u>	<u>0.000***</u>
IR4: I'm willing to rent everyday clothes over the next 12 months	1.48	3.58	<u>90.064</u>	<u>0.000***</u>
IR5: I'm willing to rent clothes for an event in the upcoming year	2.57	5.35	<u>15.356</u>	<u>0.000***</u>
IR6: I'm willing to rent luxury clothing in the upcoming year	2.28	4.74	<u>0.604</u>	<u>0.000***</u>
IR7: I will try to replace the purchase of clothing with the rental of clothing	1.67	4.04	<u>15.743</u>	<u>0.000***</u>
IR8: In the future, I will rent clothing instead of buying it	1.74	4.08	<u>7.745</u>	<u>0.000***</u>
EC1: The effects of pollution on health are worse than we think	5.50	6.11	<u>19.405</u>	<u>0.001***</u>
EC2: Pollution is responsible for climate change	5.43	6.20	<u>22.120</u>	<u>0.000***</u>
EC3: It is important that the products I use do not harm the environment	5.68	6.17	<u>15.394</u>	<u>0.002***</u>
EC4: My concern for the environment affects my purchasing habits	4.38	5.24	<u>3.229</u>	<u>0.000***</u>

EC5: I am willing to be inconvenienced by taking actions that are more environmentally friendly	4.64	5.44	<u>6.119</u>	<u>0.000***</u>
EC6: I am an environmentally responsible person	5.12	5.39	<u>2.515</u>	<u>0.105</u>
M1: I am a materialistic person	3.12	3.40	<u>0.438</u>	<u>0.176</u>
FL1: I am the first to try something new in fashion, and therefore many people consider me a leader	2.19	3.13	<u>1.491</u>	<u>0.000***</u>
U1: I usually look for clothes that let me create my own style	4.64	5.37	<u>1.071</u>	<u>0.000***</u>
PC1: I like to look for (and find) the best prices	4.59	5.27	<u>4.248</u>	<u>0.003**</u>
II: I like to try new things	2.29	3.14	<u>1.851</u>	<u>0.000***</u>

*** p<0.001; ** p<0.05; * p<0.1

Table 4. Characterization of cluster groups.

Linear Group (G1)	Circular Group (G2)
(N=180)	(N=93)
No Prior rental experience (N=17295.6%)	Yes Prior rental experience (N=1415.1%)
Male (N=46-25.6%)	Male (18.3%)
Female (74.4%)	Female (N=7681.7%)
No Buying of second-hand clothes (N=11362.8%)	Yes Buying of second-hand clothes (N=4851.6%)
Basic (4.4%)	Basic (4.3%)
High school (N=5731.7%)	High school (22.6%)
University graduate (63.9%)	University graduate (N=6873.1%)

Table 5. Characteristics of individuals with prior experience in clothing rental (N=22).

Gender	Level of studies	
Male	22.7%	Basic 4.8%
Female	77.3%	High school 23.8%
Net monthly income of the family unit	University graduate 71.4%	
Under €1,500	18.2%	Employment situation <u>Laboral situation</u>
€1,500 – €3,000	59.1%	Employee 68.2%
Over €3,000	22.7%	Self-employed 9.1%
Age	Unemployed 18.2%	
18-35	27.2%	Student 4.5%
36-50	36.4%	
Over 50	36.4%	