



SCHOOL OF  
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Perceived Benefits and Risks in Adoption Intention of  
Fast Fashion Rental Services

An Empirical Study in the Context of Digital Peer-to-Peer Platforms

by

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*“You never change things by fighting the existing reality.  
To change something, build a new model that  
makes the existing model obsolete.”*

— R. Buckminster Fuller (1975) —

# Abstract

**Title:** Perceived Benefits and Risks in Adoption Intention of Fast Fashion Rental Services: An Empirical Study in the Context of Digital Peer-to-Peer Platforms

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**Keywords:** Fashion rental services, fast fashion, peer-to-peer platforms, consumer behaviour, environmental sustainability, collaborative fashion consumption, adoption intention

**Thesis Purpose:** The present research investigates the relationship between five perceived benefits: environmental, hedonic, financial, functional, and social, as well as two perceived risks: hygiene and loss of ownership, with consumers' intention to adopt peer-to-peer fashion rental services in the fast fashion segment.

**Theoretical Perspective:** The Extended Unified Theory of Acceptance and Use of Technology (UTAUT2) from Venkatesh, Thong and Xu (2012) was employed. Additionally, studies from research areas of collaborative fashion consumption, rental services, peer-to-peer platforms and the fashion literature, served as a background for hypotheses formulation guiding the data analysis. The hypotheses translate perceived benefits and risks addressed in the literature into the corresponding constructs in the adapted UTAUT2 model.

**Methodology:** The relationships between benefits, risks and behavioural intention were assessed by employing a quantitative research design. Following a deductive approach, a multiple linear regression analysis was conducted to test the constructed conceptual framework.

**Empirical Data:** Non-probability sampling was applied, and respondents were recruited via a self-completion web-based questionnaire (n=362).

**Findings:** The analysis confirmed that the perceived benefits of environmental sustainability, hedonic motivation, performance expectancy and social influence have a positive relationship with a consumer's intention to adopt peer-to-peer fashion rental services in the fast fashion segment, whereas price value and effort expectancy were found to be insignificant. Furthermore, the risks related to hygiene and loss of ownership displayed a negative relationship with the examined adoption intention, confirming the results of previously conducted studies.

**Implications (Theoretical/Managerial):** This research indicates, contrary to literature, that not all perceived benefits are significant in predicting adoption intention of peer-to-peer rental platforms in the fast fashion segment. The insights generated by this study can assist marketers in determining potential adopters. What is more, this study provides platforms and fast fashion companies with strategies to showcase the relevant consumer benefits and mitigate the risks, thereby targeting their consumers effectively. By doing so, industry actors can utilise their resources efficiently and encourage consumption practices that are ecologically sustainable.

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This year has been anything but ordinary, not only to us, but to the world as a whole. We have all been forced to adapt to new circumstances, be tolerant, and remain hopeful that better times await us. With that in mind, writing this acknowledgement is a particularly bitter sweet moment because it means that this challenge is coming to an end. What we have learned this year at Lund University has extended above and beyond academia. We have learned what it means to strive for more and what it feels like to step outside our comfort zones. Our professors, by showcasing their passion for their subjects, have inspired us to do more and be more, and for that we are extremely thankful.

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We cannot forget the support we got from our families and friends back home who encouraged us along the way. We thank them for being there, listening to us and telling us things will turn out fine. We wish they could share our graduation with us, but we know they are proud of us wherever they are.

And of course, to our fellow IMBM classmates, we thank you for sharing this experience with us and making it memorable despite the circumstances. Although our paths may part after this year, you hold a very special place in our hearts.

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*Lund, 31 May 2021*



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Dana Kamand



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# List of Abbreviations

B2C	Business-to-Consumer
CC	Collaborative Consumption
CFC	Collaborative Fashion Consumption
DV	Dependent Variable
FRS	Fashion Rental Service
IV	Independent Variable
P2P	Peer-to-Peer
P2P-FRS	Peer-to-Peer Fashion Rental Service
UTAUT	Unified Theory of Acceptance and Use of Technology
UTAUT2	Extended Unified Theory of Acceptance and Use of Technology

# 1 Introduction

*The following introductory chapter familiarizes the reader with the research topic by first describing the development and relevance of the collaborative consumption movement in the fast fashion segment. The background and problematisation sections determine the initial positioning of the presented study. This allows for the formalisation of the research purpose and question. Following that, the chapter addresses the study's intended contributions and concludes with an outline of the thesis.*

## 1.1 Background

*“I have recently realised that I have so many clothes that I don't wear. So, renting clothes would definitely make sense to me, plus it would save me a lot of closet space” – Female, 32*

*“It is funny to me how more and more people I know are interested in renting fashion; thinking that it would help the environment when everybody knows fast fashion can never be sustainable.” – Male, 26*

As highlighted by Bauman (2000), the world has entered the era of what is called “liquid modernity”. While rationality and order were the centre of the former era, liquid modernity is characterized by globalisation, the lack of a rigorous system for control and endless opportunities to partake in; making it difficult for individuals to choose only one option (Bauman, 2000). In this era, further facilitated by the rise of Web 2.0 and digitalisation, objects and structures of civilisation are becoming progressively dematerialised thereby challenging the customary concept of ownership (Bardhi & Eckhardt, 2012; Belk, 2014). While “we are what we have” might have been the cornerstone of consumer behaviour at one point, today this is shifting to “we are what we access and experience” (Belk, 1988; Bardhi & Eckhardt, 2012). That being the case, the lack of ownership presents itself as a pivotal change in the business environment as consumers seek opportunities that provide them with access and experience (Lawson, Glein, Perren & Hwang, 2016). This shift in paradigm serves as an important opportunity for companies, pushing them to pursue this growing market of alternative-seeking consumers.

However, in a world witnessing substantial environmental damage, companies face yet another task: sustainable transformation. While industry efforts, driven by governmental regulations, have been geared towards production, today they shift focus to what comes after that: consumption (Šiuškaitė, Pilinkienė & Žvirdauskas, 2019). Pressured by an increasing number of environmentally-conscious consumers, companies must rethink their offerings and not only their methods. In fact, today's consumers have come to realise the impact their actions have on the environment. With that in mind, they are attempting to alter their lifestyles, not only by recycling and riding bikes, but by consuming differently (Niinimäki, Peters, Dahlbo, Perry, Rissanen & Gwilt, 2020). Their efforts, nonetheless, require a large-scale collaboration

between various stakeholders as they entail a change from the supply and demand sides (Niinimäki et al., 2020).

Driven by these shifts in consumer mindsets, unconventional consumption models focused on short-term access and sharing have witnessed a growth (Bardhi & Eckhardt, 2012). These new models are better known as forms of collaborative consumption (CC). Often referred to as a branch of the sharing economy (Zamani, Sandin & Peters, 2017), CC is defined as “people coordinating the acquisition and distribution of a resource for a fee or other compensation” (Belk, 2014, p.1597). In their book, Botsman and Rogers (2010) state that CC could be as transformational to mankind as the Industrial Revolution of the 19<sup>th</sup> century. They go on to further assert that CC is neither a niche trend nor a mere reaction to the 2008 financial crisis, but rather a movement that has been brewing across the globe with millions of participants. What is more, digitalisation and globalisation serve as propellers of CC, connecting people to one another. In fact, CC transactions often take place via platforms that consumers could easily access further solidifying its popularity and ease. Additionally, by engaging in CC, consumers can decrease the environmental impact associated with both production and traditional consumption all the while enjoying access to numerous underutilized items that they would otherwise have had to purchase (Botsman & Rogers, 2010; Martin, Lazarevic & Gullstrom, 2019).

However, despite a growing number of users, certain industries have not fully embraced CC. While “car-sharing” and “house-sharing” have attained a certain sense of normalcy, this proves to be more difficult in the fashion industry (Pedersen & Netter, 2015). Clothes, firmly linked to the idea of possession and self-expression, tend to be harder to lend, access and share (Becker-Leifhold, 2018; Niinimäki, 2010). While that may be the case, CC forms remain crucial to implement in the fashion industry, particularly in the fast fashion segment (Strähle, 2017). This segment, with its notorious environmental reputation, has created a hyper-consuming mentality leading to immense amounts of clothing waste (Bhardwaj & Fairhurst, 2010; Strähle, 2017). Fashion consumers, nonetheless, are gradually seeking a change and paving the way for alternative modes of consumption in the industry.

## 1.2 Problematisation

With the fashion industry responsible for almost ten percent of greenhouse gas emissions and twenty percent of water waste (Ro, 2020), sustainable operations become a necessity. Furthermore, with the global economy crippled by the COVID-19 pandemic, demand for fashion products is expected to decrease. This situation is threatening company profits and demanding an operational transformation to sustain pre-pandemic earnings (Amed, Berg, Balchandani, Hedrich, Rölkens, Young, Ekeløf Jensen & Peng, 2020). In other words, while sustainable operations might have originated from consumer demand, Amed et al. (2020) claim that the upcoming years will entail a motivation from the side of companies, not only to combat climate change but also to save profit margins. Furthermore, and although the fashion industry as a whole, poses an environmental threat, the fast fashion segment with its complex supply chains and massive production volume is particularly damaging and in need of sustainable

transformation (Strähle, 2017). While product design and eco-fashion are being implemented, shifts in consumer paradigm with regards to ownership necessitate more. That being the case, the world of fashion has witnessed the introduction of forms of collaborative fashion consumption (CFC), such as second-hand stores, swapping and renting (Lee, Jung & Lee, 2021). Fashion rental services (FRSs) have particularly stood out and started gaining traction as consumers become increasingly less attached to their possessions (Bardhi & Eckhardt, 2017; Lee & Huang, 2020a). While fashion rentals were traditionally carried out in brick-and-mortar stores for special occasions, today's FRSs are carried out digitally facilitated by developments in Web 2.0 and increased digital adoption (Lee & Huang, 2020a). In fact, the online fashion rental market was valued at \$1.26 billion in 2019 and is expected to double by 2025 at a compounded annual growth rate (CAGR) of 8.7 percent (Businesswire, 2020). With that in mind, eyes in the fashion industry are now on FRSs.

While it may be true that the luxury segment first ventured into FRSs, fast fashion is catching up with brands such as Urban Outfitters venturing into online renting and retail giants such as H&M announcing their interest in implementing FRSs (Baek & Oh, 2021; Rodrigues, 2019). In fact, with its just-in-time supply chain, fast fashion has not only put a strain on natural resources but also created immense amounts of clothing wastes shouldering a significant amount of blame for the environmental damage caused by the industry (Anguelov, 2015; Niinimäki et al., 2020). Furthermore, as the luxury segment is expected to bounce back faster than other segments in 2021, fast fashion needs a transformation that not only restores consumer confidence but also ensures economic stability (Amed et. al, 2020). That being the case, a transition towards implementing FRSs in the fast fashion sector is critical.

Despite its surge in popularity, academic literature addressing FRSs is fairly limited (Adam, Strähle & Freise, 2018; Choi & He, 2019; Clube & Tennant, 2020; Lang & Joyner Armstrong, 2018; Lang, Seo & Liu, 2019; Lee & Chow, 2020; Mukendi & Henninger, 2020), particularly in the segment of fast fashion. Research in CFC has focused on understanding consumer predictors behind its adoption. In this regard, environmental sustainability was found to be a strong motive with significant benefits (Baek & Oh, 2021; Becker-Leifhold & Iran, 2018; Botsman & Rogers, 2010; Hawlitschek, Teubner & Gimpel, 2018; Lee & Huang, 2020b; Toni, Renzi & Mattia, 2017; Zamani, Sandin & Peters, 2017). At the same time, some consumers partake in CFC for hedonic reasons pertaining to the access to exclusive items and treasure hunting (Akbar, Mai & Hoffmann, 2016; Amaro, Andreu & Huang, 2019; Becker-Leifhold & Iran, 2018; Belk, 2014; Hawlitschek et al., 2018; Lee et al., 2021). Literature has further maintained that utilitarian benefits, such as cost savings and utility are important to consumers adopting CFC (Bardhi & Eckhardt, 2012; Becker-Leifhold & Iran, 2018; Botsman & Rogers, 2010; Hawlitschek et al., 2018; Lee et al., 2021). It has further highlighted social motivation as another adoption determinant, driven by social norms and interactions (Baek-Oh, 2021; Becker-Leifhold, 2018; Borg, Mont & Schoonover, 2021; Lee & Huang, 2020a). What is more, CFC literature has started to include barriers into the analysis of adoption intention. Recent studies conducted by Becker-Leifhold and Iran (2018), Lang (2018), Lang et al. (2019) and Baek and Oh (2021) have highlighted ownership and hygiene risks as particularly significant. In fact, and amid a pandemic, hygiene and contamination concerns present themselves as especially relevant and a potential obstacle for FRSs.

Moreover, and perhaps most importantly, previous research has seldom focused on digital platforms in FRSs despite them determining the roles and forms of the transactions taking place (Choi & He, 2019; Kumar, Lahiri & Dogan, 2018). In the FRSs context, Iran and Schrader (2017) examine an increasingly popular type of platform: peer-to-peer (P2P). In P2P platforms, companies act as brokers and mediate the transactions occurring between individuals renting each other's items (Perlacia, Duml & Saebi, 2016). With the development of platform technologies and the rise of CC, P2P platforms have become especially popular in the fashion industry (Choi & He, 2019). That being the case, Choi and He (2019) analysed the operations of P2P fashion platforms to measure the value this type adds to both companies and consumers. Their findings indicate that brands stand to gain from implementing P2P platform operations. Moreover, consumers viewed fashion products' value higher when transacted via P2P platforms (Choi & He, 2019). However, given the mathematical approach adopted by this study and its focus on pricing mechanisms to measure value, the authors recommended including consumer behaviour into future studies. They further maintained that analysing the consumer aspect in a rental service context would be beneficial and worthwhile to investigate as it introduces a new mode of operations that could challenge the perceived value viewed by consumers and companies alike.

That being said, and given the novelty of FRSs as a concept, academic literature stands to gain from further researching it. This research paper highlights two gaps which are both valuable and relevant to address. The first relates to researching FRS adoption, particularly in the debated fast fashion segment. The second corresponds to a specific focus on peer-to-peer fashion rental service (P2P-FRS) platforms as they reflect a change in the mindset of consumers and provide them with practical means to actively transform operations into more sustainable ones.

### 1.3 Research Purpose and Question

The background and problematisation sections highlight the necessity for the fast fashion segment to undergo a revamping of its operations. With shifts in consumer attitudes towards access, an increasingly deteriorating climate crisis and a soaring digital adoption, the years to come present a fertile transformational opportunity for businesses to implement FRSs in the fast fashion segment. Driven by these trends and facilitated by the development in platform technologies, P2P platforms have started to gain popularity in the fashion industry rendering P2P-FRS platforms especially interesting to investigate. With that in mind, it is imperative for companies to understand consumer benefits and risks associated with P2P-FRS platforms and the extent to which they influence behavioural intentions to adopt them. Based on the aforementioned, we postulate the below research question:

**RQ:** *What is the significance of perceived benefits and risks in predicting adoption intention in peer-to-peer fast fashion rental service platforms?*

## 1.4 Intended Contributions

Our study aims for dual contributions, balancing theoretical and managerial context-based insights. First, on a theoretical level, the research extends current insights of the CFC phenomenon by assessing the relationship between perceived consumer benefits and risks with the intention to adopt P2P-FRSs. As a matter of fact, fashion renting has recently gained immense popularity as a response to current consumer trends of access-oriented and eco-friendly consumption (Bardhi & Eckhardt, 2017). However, although CFC and its different types have been extensively discussed in the literature (Adam et al., 2018; Choi & He, 2019; Clube & Tennant, 2020; Lang & Joyner Armstrong, 2018; Lang et al., 2019; Lee & Chow, 2020; Mukendi & Henninger, 2020), FRSs have attracted less direct attention within the academic community, making it a relevant topic to study. Second, and as previous research regarding FRSs predominantly focuses on the luxury realm (Feng, Tan, Duan & Bai, 2020; Guzzetti, Crespi & Belvedere, 2021; Hu, Henninger, Boardman & Ryding, 2019; Pantano & Stylos, 2020), the current study intends to contribute to existing literature by addressing the fast fashion segment and investigating how a sustainable form of consumption such as FRSs will be accepted and subsequently adopted by consumers.

Moreover, as a third contribution, this paper incorporates the dimension of P2P platforms in the context of FRSs. In doing so, we further infuse our study with the element of novelty, as prior research has mostly disregarded the aspect of platforms in this matter (Choi & He, 2019; Kumar et al., 2018). Since P2P platforms transform consumer roles by actively engaging them from both the demand and supply sides, it would be worthwhile to investigate the potential differences in the benefits and risks they perceive. Fourth, and due to our focus on P2P-FRSs, our study is rooted in the adapted UTAUT2 model (Venkatesh, Thong & Xu, 2012), allowing us to contribute to the field of technology acceptance in the topic under research. By linking the benefits and risks obtained from the literature to the constructs of the UTAUT2 theory, we aim to strengthen the connection between the streams of consumer behaviour and technology acceptance. Finally, we add another layer of novelty to our research, as existing literature on FRSs addresses the topic primarily from an exploratory approach, as opposed to our intended confirmatory path.

Besides the theoretical contributions, our research intends to provide two-fold practical contributions for companies seeking to adapt to new consumer trends in the fast fashion segment. First, we expect our generated results to provide managerial value in giving insights on benefits and risks consumers perceive as significant when intending to adopt P2P-FRSs. By doing so, businesses can better visualise their target consumers and potential adopters. These insights will allow companies to adjust their communication and marketing efforts accordingly to better target their audience. Secondly, based on our research, fast fashion businesses can enhance their understanding of whether a P2P platform for offering FRSs aligns best with their segment and their consumers' interest. Companies running P2P platforms can also benefit from the findings to assess their compatibility with fast fashion brands and their subsequent chances of success. Consequently, risky investments can be prevented, and positive customer

experiences can be guaranteed from the very beginning, resulting in competitive advantages in the long run.

In summary, our research will elaborate on published academic literature evolving around CFC. In fact, the study will add to the concept of CFC by specifically addressing FRSs. With our focus on the fast fashion segment and the inclusion of P2P platforms, we expand current knowledge and close two research gaps, which solidifies the relevance of our study and provides useful insights for companies venturing into FRSs.

## 1.5 Disposition

- ① To inform the reader about what to expect in each of the chapters, an outline of the thesis is provided. The thesis at hand is divided into seven chapters, the *first* chapter serving as the introduction. It introduces the reader to the background, problematisation, purpose, as well as contributions of our study, thus serving as an opening to the research topic.
- ② Afterwards, chapter *two* consists of a systematic literature review, providing a comprehensive synthesis of the state-of-research on the topic under study.
- ③ Next, in chapter *three*, we present the theory our research is rooted in, our conceptual framework and the corresponding hypotheses.
- ④ Chapter *four* covers our methodological research approach. Besides describing the research philosophy and design, we address the reliability, validity and replicability of the study.
- ⑤ Then, chapter *five* presents our results and analyses our gained empirical data in regard to our predefined hypotheses and research question.
- ⑥ Chapter *six* is devoted to the discussion of our findings where we connect the results to existing literature and further extend it.
- ⑦ In the final chapter, *seven*, we evaluate the achievement of the research aim and define the answer to the research question, resulting in theoretical and managerial implications to which the study contributes. This chapter concludes by summarising the limitations of our paper and providing suggestions for future studies within this research topic.

## 2 Literature Review

*The second chapter introduces literary findings that are most relevant to the research phenomenon. A review of the existing literature is provided to frame the given research field, commencing with a section on the transformation of consumer behaviour. This leads into the rise of CC as a trend driving change across all industries. This section continues to assert the importance of CC in the fashion industry particularly in the fast fashion segment. In doing so, CFC is introduced as a concept of sustainable fashion. It is further examined in the context of FRSs given their prevalence in recent years. The chapter concludes with a section on P2P platforms utilized for fashion rentals and the way they operate.*

### 2.1 Transformations in Consumer Behaviour

Ownership, once at the root of consumption, has become a challenged concept in today's consumer world. Driven by a change in their attitude towards possession, individuals are now finding new ways to consume. Furthermore, with an increasingly exacerbating climate crisis, consumers are aware of their responsibility to not only pressure companies for more sustainable operations but also transform their own consumptions habits as well.

#### 2.1.1 From Ownership to Access

Ownership and possessions have long been a fundamental point of interest for researchers in consumer behaviour (Bardhi & Eckhardt, 2012). Artefacts and their meanings in consumption constitute a strong pillar in Consumer Culture Theory particularly when it comes to the personal, cultural and social interplay that arises from their utility (Ekström, Ottosson & Parment, 2017). Belk (1988), possibly one of the most cited researchers in this subject-matter, discusses the role of possessions in identity creation and contends that individuals, by owning objects, extend their selves onto them. The figurative extension that Belk (1988) highlights pertains to the construction of a desirable image of oneself through possessions and the forging of a connection which transcends the physical boundaries. Control is a key factor in this process in the sense that more control leads to a deeper level of self-extension (Belk, 1988). While self-extension can occur through an object, a place or even a person, artefacts, which are more subject to control, are more likely to become part of one's identity (Belk, 1988). Ownership, as such, provides individuals with the freedom to use the possession as they please and to control who might gain access to it (Bardhi & Eckhardt, 2012). In that sense, purchasing and owning a new item serves more than a sheer practical value as they strengthen the sense of control and power the buyer feels. That being said, Belk (1988, p.139), claims that "we are what we have [...] is perhaps the most basic and powerful fact of consumer behaviour".

In their article, however, Bardhi and Eckhardt (2017) introduce a new dimension for consumption categorising it into two forms: solid and liquid. While solid consumption, similar

to Belk's definition, is rigid and tangible, liquid consumption is characterized by dematerialization and fluidity. Liquid consumption argues for a novel logic, one that includes practices emphasizing use, access and flexibility as opposed to traditional forms of accumulation and possession. Bardhi and Eckhardt (2017) base this concept on Bauman (2000) who argues that the world has entered the era of what is called liquid modernity. Bauman (2000) further contends that the globalised world within which we live today, interconnected and abundant in options, puts consumers in a tough situation when it comes to making choices. With consumers being exposed to a plethora of products and services, they do not want to be confined to only one choice but rather desire access to many. Furthermore, liquid modernity, unlike its preceding era is not bound by rationality in decision-making. It promotes experience and experimentation and encourages consumers to break free from traditional modes of consumption (Bauman, 2000).

As a matter of fact, and in a world constantly on the move, possessions become more of a burden than an asset by deterring individuals from experiencing more (Bardhi, Eckhardt & Arnould, 2012). In that sense, the relationship with possessions begins to revolve more about the experience they provide individuals with as opposed to the act of ownership itself (Bardhi et al., 2012). That being said, a solid form of consumption associated with possession becomes less favourable in comparison to liquid consumption. Furthermore, and driven by individual awakenings regarding the environmental impact of consumption waste, access as opposed to ownership becomes not only more popular for consumers but also more critical for the environment.

### *2.1.2 The Environmentally-Conscious Consumer*

The continuous technological advancements the world is witnessing have impacted the quality of life in numerous ways. While operations and processes might have benefitted from the efficiency generated, the environment has witnessed a particularly detrimental effect (Akehurst, Afonso & Gonçalves, 2012). Global warming, acid rain, resource depletion, air pollution and water pollution are some of the countless problems facing the world today. Although countries have been attempting to battle this damage for years, it is clear that more needs to be done. Individuals have become particularly aware of the situation and understand the urgency of the change required (Yurk, 2020). In fact, environmental awareness, which originally peaked in the 1970's, started to regain momentum in the 1990's (Akehurst et al., 2012; Prothero, 1996). With noticeable environmental damage, increased legislations, the rise of NGOs and extensive media coverage, consumers now have a better understanding of how their daily habits impact the environment.

With that in mind, consumers are shifting towards more ecologically sustainable consumption with a particular focus on green purchases. In buying decisions, for instance, consumers have started paying more attention to environmental attributes and switching from traditional products to environmentally-friendly ones despite the additional cost (Akehurst et al., 2012; Brochado, Teiga & Oliveira-Brochado, 2017; Darnall, Ponting & Vazquez-Brust, 2012; Stanley, Lasonde & Weiss, 1996). With its focus on the production side, however, green

purchasing risks the creation of environmental rebound effects, increased product prices and possible quality reduction (Hertwich & Katzmayer, 2004). Moreover, as overconsumption and the subsequent waste produced pose a serious environmental threat, simply purchasing green products instead of non-green ones does not represent a sustainable solution (Brown & Venkatesh, 2005). What is required then is a radical change in consumer behaviour that focuses not only on the nature of products but more so on the act of consumption itself. Contrary to modern consumption, sustainable consumption aims to fulfil basic requirements and stresses on necessities and convenience (Quoquab & Mohammad, 2016). Doing so reduces the amount of waste produced especially in today's societies which are entangled in a throw-away mentality (Quoquab & Mohammad, 2016). Consumers, as such, are embracing new practices that revolve around purchasing less and accessing more (Bardhi & Eckhardt, 2012). This is where CC comes in, presenting itself as a sustainable mode of consumption focused on short-term access and sharing. It thereby provides alternatives for consumers who wish to transform their consumption practices for the sake of the environment (Bardhi & Eckhardt, 2012; Botsman & Rogers, 2010).

## 2.2 The Rise of Collaborative Consumption

Due to their theoretical relevance, numerous scholars have started examining new collective consumption concepts such as sharing (Belk, 2010; Lamberton & Rose, 2012), prosumption (Ritzer & Jurgenson, 2010), connected consumption (Schor & Fitzmaurice, 2015) and access-based consumption (Bardhi & Eckhardt, 2012). The underlying notion behind these concepts is to support the idea of using products rather than owning them. Although these practices have many characteristics in common, each has its distinct approach. In prosumption, for instance, the consumer is assigned an active role by being involved in the production process, while in connected consumption the social aspects of sharing are mainly in focus (Becker-Leifhold & Iran, 2018). Access-based consumption, on the other hand, promotes the idea of ownership-free consumption above all. However, the term CC primarily covers all sorts of products and services that involve the collective use of excess resources (Pedersen & Netter, 2015). As such, this study focuses primarily on the umbrella term CC without neglecting the other related concepts.

While CC was touched upon by few researchers (Felson & Spaeth, 1978), it was Botsman and Rogers (2010) who specifically addressed this concept. The authors provide an up-to-date definition of CC describing it as the rapid explosion in “traditional sharing, bartering, lending, trading, renting, gifting, and swapping redefined through technology and peer communities” (n.p.). The authors were also the first to emphasize the relevance of information and communication technologies when defining CC. Belk (2014), however, has recently criticized this definition contending that the authors do not take the differences between sharing, gifting and exchanging in the market into account, which he claims is essential when conceptualizing CC. According to Belk (2014), “collaborative consumption is people coordinating the acquisition and distribution of a resource for a fee or other compensation” (p.1597). His consideration of other compensation allows the definition to encompass trade, barter and

swapping, all of which have the exchange of non-monetary compensation in common. Belk's (2014) definition, however, excludes sharing activities and gifting, since the former does not involve any type of compensation and the latter entails a full transfer of ownership. In other words, Belk (2014) argues that CC refers to all collaborative activities that do not include a transfer of ownership but do include a form of compensation. Thus, in his view, all concepts subsumed under the umbrella term CC can be differentiated in terms of compensation and ownership. In our study, we refer to the definition of Belk (2014) for the concept of CC, while simultaneously considering the relevant existence of information and communication technologies as mentioned in the definition of Botsman and Rogers (2010).

Driven by consumer trends and government pressure for more sustainable operations, a proliferation of business-led CC models has recently emerged focusing on pooling or sharing of resources, products and services (Botsman & Rogers, 2010; Gansky, 2010). Prominent examples of CC models include *Uber* (car-sharing) as well as *Couchsurfing* and *Airbnb* (space-sharing) (Pedersen & Netter, 2015). Next to their rapid growth, these listed businesses have their presence as online platforms in common. This addresses the influential role of new business opportunities created by information and communication technologies, especially with increasing digitalisation (Iran & Schrader, 2017). In fact, in the context of CC, digital platforms are valuable, since they enable addressing consumers on a broader scale. What is more, they provide consumers with means to find what they need at any time in a more environmentally friendly way.

While CC enjoys both popularity and success in certain industries such as cars and accommodation (Iran & Schrader, 2017; Pedersen & Netter, 2015), others are still behind. The fashion industry, for instance, is just recently embracing CC and implementing its models (Pedersen & Netter, 2015). Although it is striving towards some form of sustainability through product design, there exists an urgent need to decrease material and textile disposals (Becker-Leifhold, 2018; Iran & Schrader, 2017). This is especially the case in fast fashion which increases apparel turnover and clothing waste (Bhardwaj & Fairhurst, 2010; Strähle, 2017). As such, CC in the fast fashion segment is not only relevant but also vital to implement.

## 2.3 Collaborative Consumption in the Fast Fashion Segment

Given the detrimental environmental impact of the fast fashion segment and the sustainable nature of CC, implementing its models is essential. With that in mind, CFC has been witnessing a slow growth in the fast fashion segment.

### *2.3.1 Fast Fashion Requires Sustainable Transformation*

Fast fashion is defined as “a business strategy which aims to reduce the processes involved in the buying cycle and lead times for getting new fashion product into stores, in order to satisfy consumer demand at its peak” (Barnes & Lea-Greenwood, 2006, p.3). In other words, a fast fashion system combines both enhanced product design abilities with swift responsiveness on

a manufacturing and distribution level (Cachon & Swinney, 2011). Fast fashion was introduced to the industry following the rise of fashion-conscious consumers who no longer desired simple clothes but instead wanted to keep up with the latest trends (Bhardwaj & Fairhurst, 2010).

To cater to that need, fast fashion companies replicated looks from fashion shows, magazines and red-carpet events and had them on their store shelves in a matter of weeks (Wahnbaeck, 2015). Moreover, in an attempt to encourage impulsive buying, the newly introduced lines would generally be priced lower (Bhardwaj & Fairhurst, 2010). In fact, and as assortments only last for a limited time, consumers would visit stores more often to get items they fear would be out of stock soon (Bhardwaj & Fairhurst, 2010). In short, consumers shopped more frequently and viewed their purchased items as disposable given their limited lifespan of ten washes (Joy, Sherry, Venkatesh, Wang & Chan, 2012). In addition to an increase in purchase frequency, fast fashion led to more frequent changes in clothes, an increase in the amount of unworn clothes and in the rate of clothing disposal (Strähle, 2017). As a matter of fact, between the years 1992 and 2002, the usage of fast fashion items was shortened by half, driven by a consumer throwaway mentality and the poor quality of items utilised in manufacturing (Bianchi & Birtwistle, 2012; Joung, 2014). Moreover, a whopping 5.8 tons of clothes are thrown away every year in Europe with 75 percent getting burned or ending up in garbage cans (Garcia, 2013; Wahnbaeck, 2015). In short, with its never-ending supply, fast fashion managed to not only impact consumers but also leave a damaging print on the environment.

That being the case, the last few years ushered in a considerable focus on fast fashion's detrimental environmental impact, putting its non-financial costs at the centre of the global agenda (Niinimäki et al., 2020). However, and despite this publicized attention, this segment has yet to fully incorporate sustainability into its operations (Niinimäki et al., 2020). In fact, and given the mounting volumes of produced and wasted clothes, fast fashion has become a major environmental threat (House of Commons Environmental Audit Committee, 2019). Furthermore, with its long and complex supply chains, every step in the production process entails environmental damage. The growth and cultivation of cotton and yarn, for instance, necessitate the usage of sizeable amounts of water. The production of only one tonne of textile requires 200 tonnes of water. In fact, in 2015, the fashion industry alone utilised 79 billion cubic meters of water (Global Fashion Agenda, 2019).

Above and beyond water scarcity, fast fashion contributes to polluting local waters in the manufacturing countries. As the production process entails the use of chemicals and given the improper treatment of waste water, the latter presents a significant threat to entire ecosystems further exacerbating the ecological damage (Anguelov, 2015). As a matter of fact, over 15,000 types of chemicals are utilised in the manufacturing process of the textile industry, beginning with the process of producing the fibres (Roos, Jönsson, Posner, Arvidsson & Svanström, 2019). Furthermore, the agrochemicals that seep into the soil during this process can lead to its infertility and the death of microorganisms living within it (Claydon, 2017). While the planting of the raw material contributes to chemical pollution and water waste, the remaining stages of the production process hold a significant carbon footprint (United Nations Framework Convention on Climate Change, 2018). The textile industry solely is responsible for around 8.1

percent of global carbon dioxide emissions (Quantis, 2018). This is not only due to the industry's substantial energy consumption but also the sources it utilises (Laili, Li & He, 2017).

Having said that, the necessity for integrating environmental sustainability within the strategy of fast fashion companies has become an increasingly urgent matter. In fact, this segment is now faced with pressure not only from governments but also from environmentally-conscious consumers who are often sceptic of fast fashion's motives given its controversial track record (Kang & Hustvedt, 2014; Ritch, 2015; Schaltegger & Hörisch, 2017). It is worth noting, however, that consumers today are aware not only of the impact companies make but also that of their own consumption patterns. This awareness paved the way for what is known as "sustainable consumerism" (Botsman & Rogers, 2010; Singh, Iglesias & Batista-Foguet, 2012). With that in mind, and given the power consumers hold as environmental actors (d'Astous & Legendre, 2009), sustainable transformations in the fashion industry are more achievable. Driven by access-oriented consumers who aim to conserve the environment, CFC presents itself as a perfect candidate to do so.

### *2.3.2 Collaborative Fashion Consumption as a form of Sustainable Fashion*

In light of the multiple environmental issues that have risen in recent decades, the discussion on sustainable fashion has intensified (Strähle, 2017). In this regard, the fast fashion segment and its harmful environmental impact has taken the centre stage in this global debate (Niinimäki et al., 2020). As a result of this public attention, clothing companies have increasingly shifted their focus to the concept of sustainable fashion consumption and started to incorporate sustainable fashion into their repertoire (Iran & Schrader, 2017). Sustainable fashion, refers to garments, which are "designed, produced, (re)used, and discarded in a way that is aligned with the concept of sustainable development" (Iran & Schrader, 2017, p.470). Thus, sustainability is not only related to the production, but also to the usage and after-usage phases of garments (Luján-Ornelas, Güereca, Franco-García & Heldeweg, 2020).

Efforts to foster sustainability in fashion can, according to Iran and Schrader (2017), be systematically categorized into the three following groups: production, consumption and legislation, as illustrated in *Figure 1*. For many years, practitioners and academics prioritized their efforts on the legislation and production groups while neglecting consumption (Iran & Schrader, 2017). Legislation emphasized the role of governmental endeavours to transform unsustainable fashion into a greener, more sustainable one, by means of regulations and laws (Siegle, 2011). Production, on the other hand, focused on manufacturing more sustainable clothes. Hence, the traditional practices of the industry were modified by emphasizing the usage of organic materials, upgrading manufacturing processes and technologies as well as improving working conditions of labours (Fletcher, 2008). In this regard, the introduction of eco-fashion has been identified as the most prominent strategy towards sustainable fashion at this stage (Ceballos, 2011).

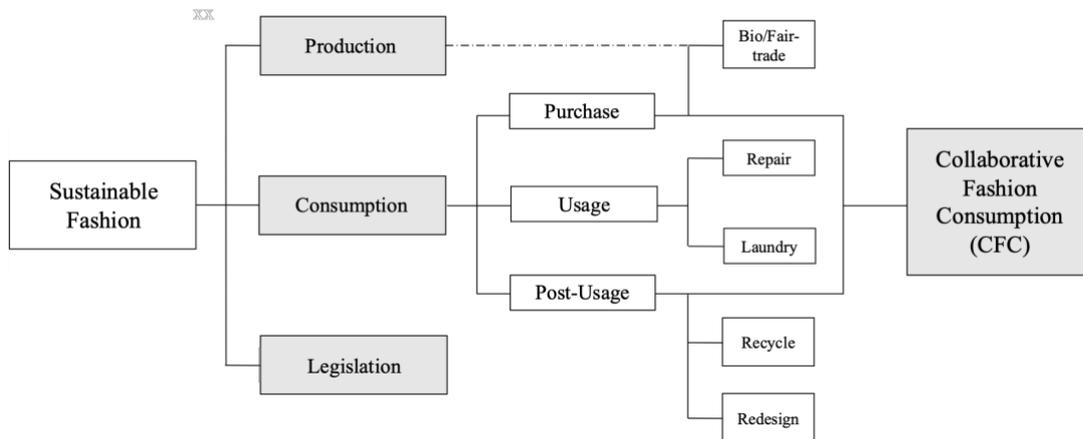


Figure 1: Collaborative Fashion Consumption as an Element of Sustainable Fashion (Iran & Schrader, 2017, p.471)

Meanwhile, it has been recognized that product substitution alone is not as effective as earlier assessments suggested (Lorek & Spangenberg, 2014). With 60 percent of the negative environmental impact of garments occurring at the consumption stage (Skov & Koefoed, 2010), it is understandably the most appropriate stage within which change in the industry needs to occur. Therefore, the scope of sustainability research has recently expanded to the consumption phase with CFC being the driving force, as individual consumption continues to have harmful effects on the environment (Iran & Schrader, 2017).

CFC, stemming from the overarching concept of CC, is defined by Iran and Schrader (2017) as a form of “fashion consumption in which consumers, instead of buying new fashion products, have access to already existing garments either through alternative opportunities to acquire individual ownership (gifting, swapping, or second hand) or through usage options for fashion products owned by others (sharing, lending, renting, or leasing)” (p.472). According to the authors’ definition, CFC can be divided into two parts: transfer of and access over ownership (Iran & Schrader, 2017). When combining it with Belk’s (2014) abovementioned definition for CC, the converging CFC forms that remain are swapping, second-hand, lending, renting and leasing, as depicted in *Figure 2*.

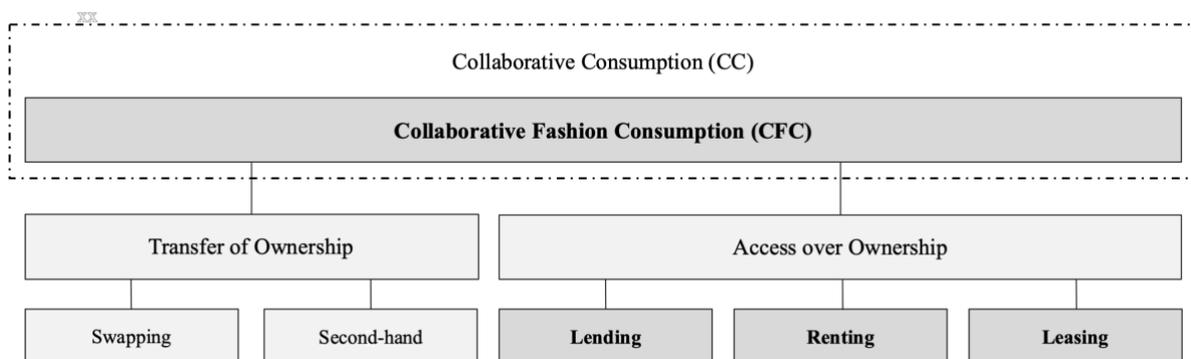


Figure 2: Definition of Collaborative Fashion Consumption (own illustration)

Existing literature contends that forms of CFC, in one way or another, serve to promote sustainability with their efficiency and sufficiency effects (Iran & Schrader, 2017; Niinimäki

et al., 2020). The former, according to Hinterberger, Luks and Schmidt-Bleek (1997), occurs when product usage entails a lower environmental burden, which can be generated by CFC. In fact, a lower environmental impact is obtained when a consumer opts for CFC thus favouring used garments over newly produced ones (Iran & Schrader, 2017). Furthermore, usage intensification, one form of efficiency effects, increases the frequency of uses during the product lifetime, by making (un)used garments available to others. In this respect, the adoption of CFC can act as a countermeasure, as it increases the chances of exploiting the full usage potential of clothes or extends its lifetime (Iran & Schrader, 2017). Additionally, this facilitates the satisfaction of consumer needs with fewer products enabling consumers to substitute the purchase of new clothes leading to the sufficiency effects of CFC.

Conversely, sufficiency effects in terms of sustainability, refer to the satisfaction resulting from a reduced number of products used (Figge, Young & Barkemeyer, 2014). Based on this perception, the abovementioned efficiency effects generated by CFC could foster a more sufficiency-oriented consumption behaviour on both the macro-level and the personal level (Mont, Dalhammar & Jacobsson, 2006) as well as on the personal level (Speck & Hasselkuß, 2015). Accordingly, consumers rethink their wish to use, when they have to pay for each single product use, whereas this is clearly not the case when consumers pay for buying a product. (Iran & Schrader, 2017). For instance, if a consumer needs clothes for a special occasion and the price is subjectively perceived as relatively high, the consumer might stick to already owned items or asks peers for lending, swapping or sharing of existing garments. However, the significance of this effect might be questionable, since many consumers might simply turn to more affordable alternatives once the purchase price is deemed too expensive. Nonetheless, “CFC fosters the chance for consumers to own only the goods they really need and use” (Iran & Schrader, p.477), thus creating individual sufficiency effects. In other words, by transferring (un)used garments to places where they are needed, CFC enables consumers to reduce what Hinterberger et al., (1997) define as the consumer’s “environmental backpack”, which consequently results in a more sufficient lifestyle.

It is worth noting that as hyper-consumption in the fast fashion segment is under increased scrutiny, certain CFC models stand out when it comes to their added value (Niinimäki et al., 2020). Renting is one of those models as it offers consumers the chance to utilise items without taking the responsibility of owning them, thereby combining access and environmental awareness (Bardhi & Eckhardt, 2017). As the fast fashion segment is known to shorten product lifecycles and generate more waste, a “rent-based and closed-loop supply chain” holds significant environmental value (Hu, Li, Chen & Wang, 2014, p.7063). Furthermore, fuelled by advancements in technology and logistics, FRSs are witnessing a growth in the industry and luring in traditional businesses to reconsider their existing operations (McDowell, 2019; Meyersohn, 2019).

## 2.4 Fast Fashion Rental Services

With environmentally-conscious consumers, fast fashion companies are faced with a conundrum of balancing fashion appetites and sustainable operations (Henninger, Bürklin &

Niinimäki, 2019). As a result, businesses are now even modifying how they operate by introducing systems that add services to their garments, resulting in usage intensification and lifetime extension of fashion pieces (Mukendi & Henninger, 2020). One of these services is fashion rental.

Renting, according to Durgee and O'Connor (1995, p.90), is defined as “a transaction in which one party offers an item to another party for a fixed period of time in exchange for a fixed amount of money and in which there is no change of ownership”. It therefore includes a party that rents out (leases) and a party that rents. Transferring the concept to the fashion landscape, rental services offer users access to garments for a specific time and price (Mukendi & Henninger, 2020). FRSs, thus, prioritise the use of products over ownership and are attractive for consumers who want to have access to various fashion pieces without the responsibility of owning them (Bardhi & Eckhardt, 2012). In fact, the rental company or asset provider retains ownership of these products, which allows them to rent garments to multiple people for different time periods thereby generating profits (Pedersen & Netter, 2015).

The practice of renting garments, however, is not entirely new to the fashion industry. Traditional fashion shops, based on brick-and-mortar stores, responded to consumer demand to rent clothes for special occasions (like weddings) decades ago (Baek & Oh, 2021). Since the rise of CC, renting out luxury fashion items has gained popularity with consumers who opt to attain novelty and ensure sustainability (Choi & He, 2019; Feng et al., 2020). “Bag Borrow Or Steal” for instance, has been providing rental services for designer handbags on its platforms to US consumers for over a decade. Leveraging on progressive technology, the contemporary fashion rental business has established digital platforms to temporarily offer consumers their desired products at their desired time (McDowell, 2019). Consequently, clothing has re-shaped itself as a service and gained traction in the industry and academic press (Armstrong, Niinimäki, Lang & Kujala, 2016; Becker-Leifhold & Iran, 2018; Lee & Huang, 2020a; Lee & Chow, 2020; Park & Joyner Armstrong, 2019a). Feng et al. (2020) particularly pointed out to the dual effects created by fashion rental platforms, one being a rental market expansion and the other a traditional purchase cannibalization. They contend, however, that the former dominates the latter, highlighting the added value of brands considering rental platforms. With that in mind, designer brands are more encouraged to forge collaborations with rental platforms instead of compete with them (Feng et al., 2020).

In fact, the fashion industry has already nurtured some successful businesses, such as the New York based fashion rental platform “Rent the Runway”. The online fashion rental pioneer is, with its nine million members and more than \$100 million revenue, a prime example within the industry (Lee & Chow, 2020). By offering its clientele unlimited clothing rentals for a monthly membership fee starting at \$69 (Rent the Runway, 2021), the company has managed to successfully establish itself in the market (Little, 2019). After the success of “Rent the Runway”, a number of online fashion rental portals were launched, including “Armoire” (USA), “Gwynnie Bee” (USA), “MSParis” (China), “GlamCorner” (Australia), “Tumnus” (Australia), “Girl Meets Dress” (UK), “Lena” (Dutch) and “ShareWear” (Sweden), to name a few (Lee & Huang, 2020b). However, while the FRSs market has been predominantly controlled by the luxury segment, established fast fashion companies such as Urban Outfitters

and Banana Republic have recently joined the trend and incorporated FRSs into their existing business in 2019 (Baek & Oh, 2021). In the same year, fast fashion giant H&M announced its trial of entering the rental market via a flagship store in Stockholm (Rodrigues, 2019), further fuelling the interest of the market.

Companies implementing FRS operations can do so through business-to-consumer (B2C) or P2P platforms (Iran & Schrader, 2017). While the B2C platform necessitates the presence of a company supplying the products, a P2P includes consumers offering their existing ones (Iran & Schrader, 2017). In that sense, P2P-FRS platforms do not entail the production of new items but solely the reuse of owned ones. As the environmental impact of rental services is highly contingent upon its ability to reduce production and increase usage (Hu et al., 2014; Iran & Schrader, 2017), P2P-FRS platforms present themselves as a significantly effective option. Furthermore, as highlighted by Choi and He (2019), engaging in P2P-CC platforms adds value to brands, platforms and most importantly consumers. With that in mind, a closer examination of P2P-FRS platform operations is required and will be addressed in the following section.

## 2.5 Peer-to-Peer Fast Fashion Rental Service Platforms

P2P clothing rental, billed by Roberts-Islam (2019) as “the Airbnb of fashion”, is considered a solution with significant potential for circularity in the fashion industry. In P2P operations, traditional market dynamics are challenged, and consumers step out from a merely passive role to a more active one (Ableitner, Tiefenbeck, Meeuw, Wörner, Fleisch & Wortmann, 2020). In fact, and as highlighted by Kumar et al. (2018), P2P operations substitute the traditional salesforce with “micro-entrepreneurs”. P2P operations further exemplify notions of freedom, independence and mobility as they include a new way of digital market operations, one that grants the consumer control over not only what is being demanded but also what is being supplied (Kumar et al., 2018).

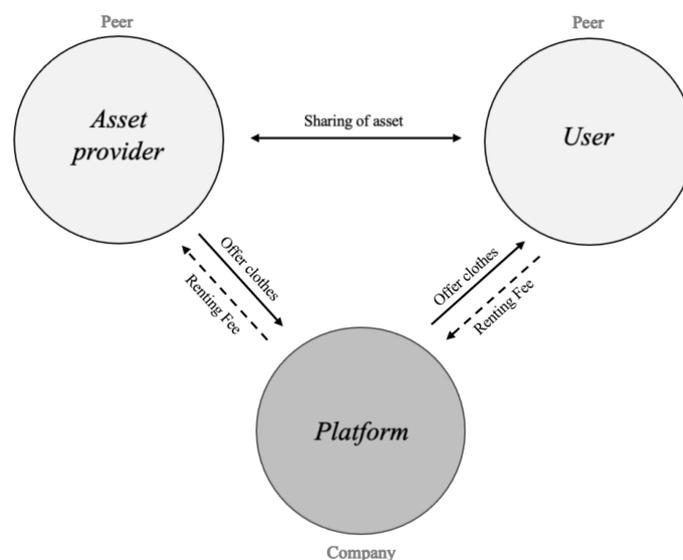


Figure 3: Peer-to-Peer Platform Operation Flow  
(own illustration based on Šiuškaitė, Pilinkienė & Žvirdauskas, 2019)

In P2P platforms, as illustrated in *Figure 3*, the supply and demand sides interact with each other through the intermediation of a third party (company), using the digital platform it provides (Šiuškaitė et al., 2019). Transferring this to the fashion context, the P2P platform connects users to peers who rent out the desired outfit they have been looking for. Consumers in P2P-FRS platforms can therefore be categorised into those who rent others' clothes (users), and those who rent out their own clothes (asset provider). Since consumers act as suppliers of clothes, Moss (2019) maintains that P2P platform websites might be limited in terms of sizes and garments potentially rendering the rental service as good as its asset providers.

The asset provider is the party renting out their clothes and is responsible for ensuring a certain quality and hygiene standard so their garments would be accepted (Roberts-Islam, 2019). In fact, as highlighted by Kumar et al. (2018) ensuring a high-quality asset provider is one of the platform's top priorities. This is because a lack of trust in the asset provider could translate to a lack of trust in the platform pushing users to switch to competitors. That being the case, two-sided ratings are often used by platforms to assess the quality of the relationship and ensure that value is being provided to all stakeholders (Kumar et al., 2018). What is more, platform providers have recently started taking over the intake and cleaning of garments to hedge themselves against potential quality concerns and ensure that users are getting value for their money (Jaye, 2020).

Above and beyond value for money, users in a P2P platform are provided with a dynamic marketplace where environmental-conscious consumers can cut-down on consumption, as it removes the burden of ownership (Botsman & Rogers, 2010). Consequently, users do not have to pay for fashion items off the shelf but can instead obtain the service for a fraction of the actual retail price (Jaye, 2020). They also get the chance to interact with others, be it the asset providers or fellow users (Benoit, Baker, Bolton, Gruber & Kandampully, 2017). This level of involvement, however, differs based on the platform offerings (Benoit et al., 2017). While some P2P platforms require extensive information, profile building and interaction, others do not (Benoit et al., 2017). Nonetheless, as pointed out by Benoit et al. (2017), and even though such activities might be time-consuming, they are important in P2P platforms as they increase legitimacy and trust amongst the peers. Doing so would further solidify the image of the platform provider and serve as a factor adding to its success.

From a financial perspective, this service-based type of P2P, according to Jaye (2020) is beneficial for the platform provider overall, as less initial start-capital is required. In fact, the business does not need to tie money in inventory, since the asset providers make their personal clothes available. The owner of the platform, as stated by Iran and Schrader (2017) can compensate incurred expenses, such as organisational effort, and gain profits by receiving monetary compensation from the participation. In fact, the revenue scheme set by the platform is a crucial form of ensuring value generation. As highlighted by Choi and He (2019), P2P operations are beneficial for all parties engaging in it. This is especially valid when platforms implement a revenue sharing scheme as opposed to a fixed one (Choi & He, 2019). Driven by the profit, asset providers would deprive themselves of an attractive opportunity to monetize their wardrobes, as they could earn up to 85 percent of the rental fee when cooperating with current platform providers (Jaye, 2020). HURR Collective, a British P2P rental platform uses

a price model which makes their FRS worthwhile for both types of peers (Jaye, 2020). In fact, as stated by CEO and Co-Founder Victoria Prew, HURR Collective makes use of data-driven insights, such as customer spending behavioural data, in order to suggest prices that are profitable for the asset provider and affordable for the renter. Thus, consumers can benefit from another peer's good taste at a reasonable price (Moss, 2019).

Given the rising popularity of P2P platforms, they have become a topic of interest in literature (Kumar et al., 2018). Nonetheless, much of the discussion has been focused on defining the concept and addressing it from an operational and supply chain perspective. As consumers play a central role in P2P-FRS platforms, it would be highly valuable to theoretically analyse the benefits and risks driving their adoption intention. The following sections will address the latter.

## 3 Theoretical Framework and Hypotheses

*In the following section, we elaborate on the conceptual framework which we operationalise to answer the defined research question regarding the significance of perceived benefits and risks in predicting P2P-FRS adoption intention in the fast fashion segment. After an introduction to the theory used, we formulate the given hypotheses and visualize the assumed relationships in a conceptual model.*

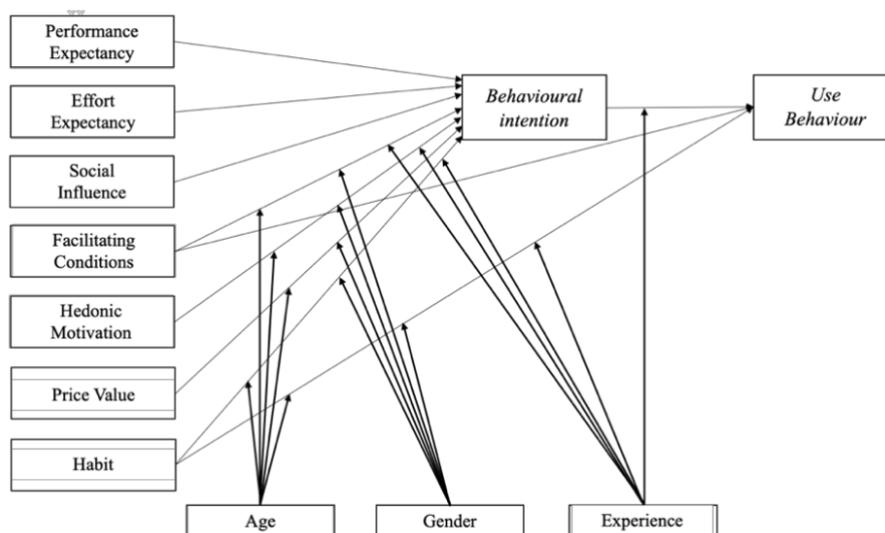
### 3.1 Theoretical Background

Previous literature examining CC has been primarily focused on motives and attitudes and was therefore, to a large extent, rooted in the theories of Self Determination, Reasoned Action and Planned Behaviour (Akbar et al., 2016; Becker-Leifhold & Iran, 2018; Hamari, Sjöklint & Ukkonen, 2016; Hawlitschek et al., 2018; Hwang & Griffiths, 2017; Lang & Joyner Armstrong, 2018; Puiiu, 2020). However, given this paper's focus on P2P-FRS adoption intention, we chose to base our study on an adaptation of the Extended Unified Theory of Acceptance and Use of Technology (UTAUT2) as presented by Venkatesh et al. (2012). This study joins the emerging research in technology acceptance in FRSs by utilising UTAUT2 model as the grounding theory. UTAUT2 has been used in several contexts and has extended beyond information systems to include mobile marketing, online shopping as well as spa tourism (Araújo Vila, Fraiz Brea & Pelegrín Borondo, 2021; Eneizan, Mohammed, Alnoor, Alaboodi & Enaizan, 2019; Tarhini, Alalwan, Al-Qirim, Algharabat & Masa'deh, 2018). Furthermore, technology, per Merriam-Webster Dictionary (2021), is defined as both “the practical application of knowledge especially in a particular area” and “a capability given by the practical application of knowledge”. That being the case, and as any new service or product introduction includes the application of practical knowledge, P2P-FRS platform fall within that category, and their adoption intention can therefore be assessed using UTAUT2.

The Unified Theory of Acceptance and Use of Technology (UTAUT) model was first introduced in 2003 by authors Venkatesh, Morris, Davis and Davis following an analysis of the most significant models used to explain user acceptance and adoption of information technology at that time. The Theory of Reasoned Action, Technology Acceptance Model, Motivational Model, Theory of Planned Behaviour, Combined TAM and TPB, Model of PC Utilization, Innovation Diffusion Theory and Social Cognitive Theory were all assessed, synthesized and incorporated, into the unified UTAUT model formulated by Venkatesh et al. (2003). The UTAUT model identifies four main constructs as determinants for user acceptance, intention and behaviour: performance expectancy, effort expectancy, social influences and facilitating conditions. However, of the above-mentioned determinants, all but facilitating conditions have a direct effect on usage intention. In fact, facilitating conditions along and usage intention are the only two constructs with a direct effect on usage behaviour. Furthermore, age, gender, voluntariness and experience are determined to be moderating influences (Venkatesh et al., 2003).

Following the introduction of the UTAUT, it was substantially adopted in studies aimed at examining intention and usage behaviour of technologies (Tarhini et al., 2018) and was therefore described by Bagozzi (2007) as significantly inclusive. In fact, in their initial journal article, Venkatesh et al. (2003) determined that the model accounts for 70 percent of the variance in behavioural intention; a value that has not been recorded by any other model. Studies were held to support the validity of this model with one particular research conducted by Dwivedi, Rana, Jeyaraj, Clement & Williams in 2019. The authors undertook a statistical meta-analysis of 43 articles that have either partially or fully adopted UTAUT. Their results confirmed the high reliability of over 0.7 for the different factors included in the UTAUT and further indicated that performance expectancy was the strongest in predicting behavioural intention. Nonetheless, and despite the wide spread of the UTAUT model and its utilisation in both organisational and non-organisational settings, it was still argued that the original purpose of the model was in fact to investigate technology usage from an organisational perspective, particularly that pertaining to employee acceptance (Venkatesh et al., 2012).

With that in mind, Venkatesh et al. (2012) set out to extend the initial model with a clear focus on the consumer context. The authors further highlighted the importance of looking into the emerging sector of consumer technologies, especially with the increase in the number of services and products directed towards them. Building on UTAUT, Venkatesh et al. (2012) introduced three constructs given their relevance for consumers. First of all, the authors argued that UTAUT takes a fairly utilitarian stance, primarily evident in the construct of performance expectancy. Hedonic motivation, given its intrinsic nature and significance in consumer research was therefore included. Second of all, the authors indicated that consumers are not only driven by effort expectancy but also by the monetary amount paid to attain the product or service which led to the addition of price value to the model. Habit was also added as studies indicate its role in technology adoption behaviour. Finally, voluntariness as a moderating variable was excluded. This version including constructs extracted from marketing literature became known as UTUAT2 and is illustrated in *Figure 4*.



*Figure 4: Extended Unified Theory of Acceptance and Use of Technology (Venkatesh et al., 2012)*

Despite the widespread adoption of UTAUT2, researchers have not always utilised it at face value but rather adapted it to the context of their studies. This has been done by excluding certain determinants and adding others that played more significant roles in the researched field (Alalwan, Dwivedi & Williams, 2014; Chao, 2019; Gao, Li & Luo, 2015; Graf & Gimpel, 2017; Hong & Cha, 2013; Piarna, Fathurohman & Purnawan, 2020; Tarhini et al., 2018). Trust, for instance is one of the factors that has been validated and added in many studies such as those conducted by Ha and Stoel (2009), Hong and Cha (2013), Gao et al. (2015) and Chang, Sun, Pan & Wang (2015). Another factor is compatibility which was mentioned by Vijayasarathy (2002) and Amaro and Duarte (2015). Perceived risks have also been added and have, in some cases, included more than one sub-factor within (Alalwan, Dwivedi & Williams, 2016; Gao et al., 2015; Koenig-Lewis, Marquet, Palmer & Zhao, 2015; Limsupanark, Ming & Pangam, 2017; Slade, Williams, Dwivedi & Piercy, 2015). That being the case, and based on the literature review of relevant factors in the FRSs context, this study will be adapting the UTAUT2 model by including the perceived risks of hygiene and loss of ownership in addition to environmental sustainability as further predictors of P2P-FRS platform adoption intention.

What is more, and as the scope of this research is intention and not actual usage, facilitating conditions will be excluded as a driver given their more significant role in predicting behaviour (Venkatesh et al., 2003). In fact, it has also been argued by Tamilmani, Rana and Dwivedi (2020) that the use of performance and effort expectancy alongside facilitating conditions hinders the latter's ability to predict behavioural intention further confirming this study's choice to exclude them. Moreover, as P2P-FRS platforms in the fast fashion segment are gaining traction (Baek & Oh, 2021) and bearing that habit is a better predictor of technologies used on a daily basis (Tamilmani et al., 2020), this study will exclude it from the research. Furthermore, age and gender as moderators will not be assessed in this study, as behavioural change regarding fashion consumption is needed among all age and gender groups. Finally, since FRSs in the fast fashion segment are still in early stages, particularly in P2P platforms, experience does not constitute a relevant factor to currently assess.

In summation, this paper will be rooted in a P2P-FRS adapted version of UTAUT2 including the following constructs: environmental sustainability, hedonic motivation, price value, performance expectancy, effort expectancy, social influence, and perceived risks.

## 3.2 Hypotheses Formulation

Research on CFC has identified several predictors of adoption (Baek & Oh, 2021; Borg et al., 2020; Lee & Huang, 2020b; Lee & Chow, 2020; Tu & Hu, 2018). As a form of CFC, consumers of P2P-FRSs may be driven by different perceived benefits: environmental, enjoyment, financial, functional and social. At the same time, adoption intention can be influenced by consumers' perceived risks (Argo, Dahl & Morales, 2006; Baek & Oh, 2021; Benjaafar, Kong, Li & Courcoubetis, 2018; Brydges, Heinze, Retamal & Henninger, 2021; Grimshorn & Jordan, 2015; Limsupanark et al., 2017). In fact, literature regarding CFC has frequently discussed the concept of hygiene as a risk; this is especially relevant now following the COVID-19 pandemic and heightened levels of contamination concern. Furthermore, and despite CFC being rooted

in new-found appreciation of access, loss of ownership has been mentioned as a potential risk for encouraging adoption. That being the case, the below section will include a discussion of consumer perceived benefits and risks, link them to their corresponding UTAUT2 constructs and formulate hypotheses regarding their relationships with the intention to adopt P2P-FRSs in the fast fashion segment.

### *3.2.1 Perceived Environmental Benefit – Environmental Sustainability*

As highlighted above and given that CFC stemmed, to a large extent, from environmentally-conscious consumers expressing the need for ecological conservation, literature finds that environmental benefits play a substantial role in encouraging CFC and subsequently FRS adoption. These benefits are referred to by Becker-Leifhold and Iran (2018) as biospheric motives and include the ethical aspect of engaging in CFC. In their 2021 paper, Baek and Oh discuss the “green value” of FRSs which also refers to the contribution they make to environmental sustainability. In fact, and given the relevance of sustainability in the context of CFC, academic literature has covered the topic extensively asserting time after time the strength of sustainability and environmental benefits in forming positive attitudes and intentions towards CFC adoption (Armstrong, Niinimäki, Kujala, Karell & Lang, 2015; Armstrong et al., 2016; Baek & Oh, 2021; Becker-Leifhold & Iran, 2018; Lee et al., 2021; Lee & Huang, 2020b).

However, in matters pertaining to sustainability, consumer perceptions differ based on the segment. The luxury segment, with its longstanding dedication to quality and value, is believed to have a higher chance than fast fashion in overcoming ecological concerns and becoming a leader in sustainability (Joy et al., 2012). Furthermore, and driven by a lack of trust in company motives, consumers are less reluctant to accept or encourage the fast fashion segment incorporating sustainability (McNeill & Moore, 2015). Label signalling, for instance, is viewed by consumers as a form of greenwashing to capture price premiums or gain a good reputation (Kang & Hustvedt, 2014; Ritch, 2015). In other words, consumers scrutinize sustainability efforts placed by the companies and expect them to exhibit social responsibility (Kang & Hustvedt, 2014; Ritch, 2015). With that in mind, and as FRSs go beyond production to altering the ways we consume, they present themselves as more transparent, holistic and socially responsible (Ritch, 2015).

Since FRSs involve sharing access to items with no transfer of ownership, they create a positive environmental impact by decreasing the amount of post-production waste and subsequent disposal (Lee & Huang, 2020a). That being the case, and given that environmentally conscious consumers tend to pursue environmentally-friendly behaviour, one could contend that they would, in fact, develop a favourable attitude and intention towards P2P-FRSs (Lee & Huang, 2020a). In circular economy models, for instance, Dururu, Anderson, Bates, Montasser and Tudor (2015) find that supporting environmental causes is a major driver in joining them. Similarly, Waight (2013) asserts that the desire to decrease waste acts as a motivator. Hiller’s (2011) study supports this by finding environmentally-friendly consumption and prevention of wasteful disposal as drivers. In fact, and in a research conducted by Armstrong et. al (2016),

reduced consumption is cited most frequently as a motivating reason to use fashion libraries, a form of renting. Furthermore, the extended-use features provided by CFC are found to be particularly interesting given their positive ecological impact (Armstrong et al., 2015).

Due to its relevance, Graf and Gimpel (2017) extended the UTAUT2 by adding environmental sustainability, which they framed in terms of improving ecological conservation. Their results indicate that environmental sustainability perceptions hold a positive impact on attitude and behavioural intention in technology acceptance and usage. The aforementioned, coupled with the plethora of studies (Armstrong et al., 2015; Armstrong et al., 2016; Baek & Oh, 2021; Becker-Leifhold & Iran, 2018; Lee et al., 2021; Lee & Huang, 2020b) asserting environmental sustainability's role in CFC adoption led us to propose the below hypothesis *H1*.

*H1: Environmental sustainability has a positive relationship with a consumer's intention to adopt fast fashion rental services in digital peer-to-peer platforms.*

### *3.2.2 Perceived Enjoyment Benefit – Hedonic motivation*

With its up-to-date looks and must-have items, fast fashion has transformed consumer behaviour by adding the pleasure of variety seeking into the shopping dictionary thereby making emotional experiences, such as enjoyment, an essential driver to its consumption (Baek & Oh, 2021; Baghi, Gabrielli & Codeluppi, 2013). This concept, in actuality, can be extended to the consumption phenomenon in its entirety with consumers nowadays not only seeking products and services but rather the exclusive experiences they entail (Oh, Fiore & Jeong, 2007). In that sense, consumers pursue fun and excitement in an effort to capture the pleasure in consumption (Holbrook & Hirschman, 1982). The enjoyment this entails is particularly significant in the shopping process as it encourages a higher degree of involvement (Suki & Suki, 2007). As a matter of fact, and as highlighted by Suki and Suki (2007), the emotions created by enjoyment constitute a strong factor in predicting the attitude towards adoption intention.

However, while P2P-FRS platforms, through their asset provider-user interactions, offer the chance to access items not available in one's surroundings, Becker-Leifhold and Schrader (2018) discuss the enjoyment of finding rare items that the mainstream market does not offer. In that sense, fast fashion, whose items replicate fashion shows or tv shows, serve to create a homogeneity in the clothes options as opposed to exclusivity (Wahnbaeck, 2015). Park and Joyner Armstrong (2019a) particularly point out to hedonic motivation being closely tied to the joy of accessing luxury items that can not be afforded. In that sense, the joy of FRSs can be linked to the high status provided by the piece of clothing, which the fast fashion segment seems to score low on.

Nonetheless, as FRSs constitute a modern consumption form, one can contend that the enjoyment of its novelty is a benefit that drives consumers to engage in it (Borg et al., 2020). While not much literature has discussed enjoyment in FRSs exclusively, this topic has been extensively addressed in studies exploring CFC (Armstrong et al., 2015; Armstrong et al., 2016; Becker-Leifhold & Iran, 2018; Jenß, 2004; Niinimäki, 2010; Roux & Guiot, 2011). CFC,

by providing access to a wide-range of products to choose from, presents itself as an enjoyable and exciting experience for users to engage in (Becker-Leifhold & Iran, 2018). Pleasant emotional experiences therefore, such as fun, satisfaction and uniqueness are fulfilled when engaging in CFC (Armstrong et al., 2016; Isla, 2013; Roux & Guiot, 2011). In fact, Borg et al.'s (2020) study finds that consumers enjoy engaging in such services given their relative originality. They also find it “luxurious” to be able to access so many products.

Venkatesh et al. (2012, p.161) define hedonic motivation as “the fun or pleasure derived from using a technology”. Technology studies have found it to be a strong determinant of acceptance (Brown & Venkatesh, 2005). Furthermore, and as highlighted by Lee (2009), a technology that consumers enjoy using influences their intention to utilise it. In the context of mobile shopping for instance, Yang (2010) concludes that the hedonic factors act as important determinants of usage. We therefore propose the below hypothesis *H2*.

***H2:** Hedonic motivation has a positive relationship with a consumer’s intention to adopt fast fashion rental services in digital peer-to-peer platforms.*

### *3.2.3 Perceived Financial Benefit – Price Value*

While the above enjoyment benefits play a solid role in creating a positive evaluation of FRSs (Armstrong et al., 2015; Becker-Leifhold & Iran, 2018; Borg et al., 2020; Lang, 2018), cost savings are also significant when it comes to the consumer perception of net gain (Lee et al., 2021). That being the case, the financial benefits of CFC have been widely addressed in literature (Armstrong et al., 2015; Baek & Oh, 2021; Bardhi & Arnould, 2005; Becker-Leifhold & Iran, 2018; Borg et al., 2020; Lee et al., 2021; Lee & Huang, 2020b; Lee & Chow, 2020; Roux & Guiot, 2011). Economic value, as per Sweeney and Soutar (2001, p.211) is defined as “the utility derived from the product due to the reduction of its perceived short term and longer term costs”. The findings of their 2001 study into consumer perceptions of value point out to the significant role that “value for money” plays in influencing attitudes and behaviours towards products and services. In fact, and contrary to popular assumptions, saving money acts as a key driver for consumers at all income levels (Becker-Leifhold & Iran, 2018). Individuals engaging in consumption activities want to feel that they receive a good value for the money spent. A positive value for money gap indicates a higher net gain thereby favouring the product or service at hand (Grewal, Monroe & Krishnan, 1998; Lee et al., 2021).

In that sense, the affordable access that CFC offers through its different models, including FRSs, serves as an appealing feature driving adoption (Park & Joyner Armstrong, 2019a). In their 2019a study, Park and Joyner Armstrong found that the majority of their interviewed consumers opted for online fashion renting as it was the best alternative given their financial constraints. This financial benefit was further solidified by the majority of interviewees stating their preference for buying over renting if they had the monetary resources. However, as they could not afford to do so, renting was the most logical and beneficial option to opt for (Park & Joyner Armstrong, 2019a). Borg et al. (2020) further contend that usage of products can be cheaper than owning especially when done on a relatively short-term. As a result, this serves as a driver for the adoption of usage services such as FRSs. Moreover, as online renting costs

are not incurred at once, but rather spread over time depending on the usage frequency, resources are freed to access other items. Financial benefits from FRS adoption are therefore perceived to long-lasting in nature and not only instantaneous (Borg et al., 2020). Nonetheless, as fast fashion apparel are on the lower spectrum in terms of price (Cachon & Swinney, 2011; Niinimäki et al., 2020; Strähle, 2017) and given the scarcity of literature studying FRSs in this segment, one could question the degree to which cost savings and financial benefits do in fact encourage rental services.

While price value had not been addressed in the original UTAUT, Venkatesh et al. (2012) added the concept in their extended version of the model (UTAUT2) given its focus on the consumer perspective and argued for its influence on behavioural intention. Following that, several studies confirmed the influence of price value on behavioural intention (Perea y Monsuwé, Dellaert & de Ruyter, 2004; Piarna et al., 2020). Furthermore, the price value, as highlighted by Venkatesh et al. (2012), can be either positive or negative depending on the monetary savings incurred by using the product or service. Our literature review in the FRSs context highlights price value as an important influencer in adoption intention. Consumers opt for online fashion rentals encouraged by their financial constraints. They also perceive FRSs as economically feasible based on the spread-out nature of the payments made. As a result, we propose the below hypothesis *H3*.

*H3: Price value has a positive relationship with a consumer's intention to adopt fast fashion rental services in digital peer-to-peer platforms.*

### *3.2.4 Perceived Functional Benefit – Performance Expectancy and Effort Expectancy*

A recent study conducted finds benefits in renting fashion to be rather utilitarian in nature with a particular focus on functionality (Mukendi & Henninger, 2020). In the FRSs context, functional benefits primarily refer to “convenient online shopping and positive product quality perception” (Baek & Oh, 2021, p.167). As the UTAUT2 model divides functionality into performance and effort expectancies, our study follows this logic by first discussing the functional aspects falling within performance expectancy followed by those linked to effort expectancy.

When utilising CFC models, consumers gain flexibility which, per Borg et al. (2020) constitutes an important value for them. They further contend that by utilising such models, consumers are provided access to a wide range of affordable styles, offering the chance to change and experiment more frequently (Borg et al., 2020). What is more, Lee et al. (2021) find that wearing the item at the right time, place and occasion (TPO) is a useful renting benefit sought by consumers. In other words, consumers find this to be a practical value that allows them to have the right items when needed.

Above and beyond flexibility, the actual quality of the item itself is an important factor particularly in the clothing sector where low quality leads to dissatisfied consumers (Niinimäki, 2014). In P2P-FRS platforms, as consumers are the asset providers, quality is harder to control.

P2P-FRS platforms that manage to combat this issue have higher chances of increasing their perceived value and encouraging adoption (Armstrong et al., 2015). Armstrong et al. (2015) suggest that providers of such services should invest in higher quality products to avoid this problem. This, however, proves to be less feasible in the fast fashion segment which offers its clothes at a lower price (Wahnbaeck, 2015). That being the case, P2P-FRS platforms are implementing quality check systems to not only ensure the quality but also protect the value they offer their users (Jaye, 2020; Roberts-Islam, 2019).

Finally, and perhaps one of the most obvious and critical functional benefits of FRSs is the closet space they create and the liberation from the burden of ownership. In that sense, FRSs act as a “test drive” for new styles without ever having to purchase (Park & Joyner Armstrong, 2019a). Moreover, some FRSs offer trial periods before subscribing to the platform adding further value to the service (Park & Joyner Armstrong, 2019a).

In their updated model, Venkatesh et al. (2012, p.159) define performance expectancy as “the degree to which using a technology will provide benefits to consumers in performing certain activities”. In other words, performance expectancy is the perceived usefulness derived from utilising the technology, or in this case P2P-FRS platforms. Perea y Monsuwé et al. (2004) find perceived usefulness, the equivalent of performance expectancy in the Technology Acceptance Model (TAM) (Venkatesh et al., 2003) to be a significant determinant of behavioural intention in online shopping. This was further confirmed by a study conducted by Piarna et al. in 2020. We therefore propose the below hypothesis *H4*.

***H4:** Performance expectancy has a positive relationship with a consumer’s intention to adopt fast fashion rental services in digital peer-to-peer platforms.*

Decreasing effort and increasing convenience can further be ensured by the design and implementation of an easy service for consumers (Armstrong et al., 2015). As a matter of fact, when products or services are not readily accessible, consumers are more reluctant to utilise them (Catulli, 2012; Tukker & Tischner, 2006). Website features, for instance, such as clear product assortments and payment procedures have been mentioned as motivators to engage in CFC platforms as they render the usage easier (Park & Joyner Armstrong, 2019a). Ease of use, as pointed out by Gansser and Reich (2021), is especially important in newly introduced concepts with which consumers are getting acquainted. However, as online transactions are becoming less of an issue in online commerce (Yu & Chen, 2018) and given the digital nature of FRS platforms, the difficulty of their usage is questionable.

Still, P2P-FRS platforms present their own set of complexities as they include not only website interactions but peer interactions as well. In fact, ease of use in the context of P2P-FRSs includes the time required to find the desired outfit from a specific set of asset providers which could be deemed inconvenient to some users (Moss, 2019). That being said, having a wide range product assortment provided can help increase the perceived ease of utilisation (Armstrong et al., 2015; Catulli, 2012). Furthermore, shipping and logistics, when provided by platforms and when clearly defined increase the perception of ease particularly in online transactions (Kaushik, Khare, Boardman & Cano, 2020). In that sense, ease of use has been discussed as a driver of CFC and subsequently P2P-FRS adoption intention falling under the broad terms of functional benefits.

Effort expectancy is defined as “the degree of ease associated with consumers’ use of technology” (Venkatesh et al., 2012, p.159). It is worth noting that effort expectancy is an equivalent to perceived ease of use in the Technology Acceptance Model (Venkatesh et al., 2003). Effort expectancy has been widely mentioned in UTAUT2 models as a strong determinant of behavioural intention (Perea y Monsuwé et al., 2004; Tarhini et al., 2018; Venkatesh et al., 2012). This is especially the case with new technologies or concepts (Gansser & Reich, 2021). As highlighted above, literature pertaining to CFC and FRS have mentioned ease of use and convenience as drivers of adoption. We therefore postulate the below hypothesis *H5*.

*H5: Effort expectancy has a positive relationship with a consumer’s intention to adopt fast fashion rental services in digital peer-to-peer platforms.*

### *3.2.5 Perceived Social Benefit – Social Influence*

Our literature review indicates that the social benefits of FRSs can be classified into two categories: increased social interactions and a favourable representation of consumers in pursuit of approval (Baek & Oh, 2021). Social interaction is particularly valued by today’s consumers who seek interpersonal relationships during their shopping experience, as claimed by Kim and Jin (2019). Their study further confirms that consumers who desire to become part of a community tend to engage in CC forms. In that sense, P2P-FRSs, with their consumer-to-consumer interactions, form the ideal basis for building relationships as the transactions allow consumers to socialize with each other (Benoit et al., 2017).

Furthermore, pressured by social norms regarding environmentally-friendly consumption, consumers can be influenced to partake in certain activities (Borg et al., 2021). Moral obligations and social peer pressures, as such, can often drive an individual to engage in CFC forms in pursuit of an enhanced social image in one’s surroundings (Becker-Leifhold, 2018). Given fast fashion’s damaging reputation, however, and the criticism it is receiving, consumers today might be more prone to avoid its brands (Kim, Choo & Yoon, 2013; Yoon, Lee & Choo, 2020). Fast fashion brand avoidance, as a matter of fact, has been addressed by authors in literature as a means of expressing a fundamental rejection of what this segment stands for (Kim et al., 2013; Yoon et al., 2020). That being the case, the direction of social influence in the fast fashion segment is debatable.

Still, previous research has indicated the role subjective norms play in encouraging environmentally-friendly behaviour such as green consumption (Khare, 2015; Tsarenko, Ferraro, Sands & McLeod, 2013). Furthermore, social influence, such as word of mouth and recommendations are important in driving behavioural intention especially for fashion-related products and services (Johnson, Mun & Chae, 2016; Lee & Chow, 2020). Lee and Huang (2020a) confirm this in their study which finds online fashion renting behaviour to be positively impacted by subjective norms and social influence.

Social influence, as per Venkatesh et al. (2012, p.159) is “the degree to which a person perceives that significant others (e.g., family and friends) believe they should use a particular

technology”. Tarhini, El-Masri, Ali and Serrano (2016) further add that social influence could refer to any pressure from the external environment that may affect one’s perception or behaviour. In assessing online fashion shopping adoption, Piarna et al. (2020) find social influence to be an influencing determinant, which is also confirmed by Shrivastava, Jain, Kamble and Belhadi (2021). Social peer pressures and moral obligations are found to exert an influence on consumers adopting CFC forms (Baek & Oh, 2021; Becker-Leifhold, 2018). We therefore postulate the below hypothesis *H6*.

*H6: Social influence has a positive relationship with a consumer’s intention to adopt fast fashion rental services in digital peer-to-peer platforms.*

### *3.2.6 Perceived Hygiene Risk*

Consumers’ sensibility levels regarding hygiene vary. However, the outbreak of the COVID-19 pandemic has reinforced contamination concerns due to the imminent risk of virus contact (Kirk & Rifkin, 2020). Contamination per se is, according to Baxter, Aurisicchio and Childs, (2016), a “process through which the quality, meaning, or value of an object change due to interaction with someone or something” (p.1219). In this regard, it is important to note that contamination can either be positive or negative, depending on the attributes or properties where contamination can be expected through physical contact (Argo et al., 2006). However, owing to hygiene concerns, the negative type is more dominant among consumers, which is why they react negatively to objects that have come into physical touch with others (Argo et al., 2006; White, Lin, Dahl & Ritchie, 2016).

Since many CC concepts involve products or services that had at least indirect physical contact with other participants, various scholars (Armstrong et al., 2015; Armstrong et al., 2016; Borg et al., 2020; Catulli, 2012; Fisher, Cooper, Woodward, Hiller & Goworek, 2008; Na’amneh & Al-Husban, 2012; Perry & Chung, 2016; Rexfelt & Hiort af Ornäs, 2009) have defined a hygiene concern as one of the main barriers for consumers to adopt to it. Consumer hygiene risk poses a substantial conflict to CFC, as the literature implies that an object can be considered contaminated as soon as another person interacts with it (Clube & Tennant, 2020). Thus, hygiene risk is particularly pronounced in FRSs, since the concept is based on the idea that multiple actors wear the same fashion piece during different time spans (Abbey, Meloy, Guide & Atalay, 2015). Additionally, there is an intimate contact between the user and the product in this practice (Armstrong et al., 2015) which leads according to Kim and Jin (2019) to a stronger perceived contamination risk among FRS participants.

As a result, when renting fashion items, consumers may intensively perceive them to be less clean and contaminated, since they have been regularly worn by others. With the ongoing global pandemic, there is a particularly heightened hygiene awareness in the sector, especially regarding the transmission of germs (Unglesbee, Howland & Vembar, 2020). Besides, uncertainty about service providers’ hygiene standards and lack of familiarity of peers increase the perceived risk of contamination even more, especially in P2P-FRSs (Hazée, Van Vaerenbergh, Delcourt & Warlop, 2019). Therefore, the problem of contamination may cause consumers to devalue rented garments, which discourages current and potential consumers

from adopting to FRSs. While users are expected to clean the clothes before they return them, consumers rely on the asset provider to properly disinfect and dry clean the items in the P2P-FRS setting. Furthermore, although companies strive to ward off negative perceptions through professional product cleaning (Park & Joyner Armstrong, 2019a), fears of contamination among consumers could deter renting clothes (Becker-Leifhold & Iran, 2018). Alalwan et al. (2014) and Alalwan et al. (2016) confirm the influence of perceived risks on behavioural intention. We therefore present the below hypothesis *H7*.

*H7: Hygiene risk has a negative relationship with a consumer's intention to adopt fast fashion rental services in digital peer-to-peer platforms.*

### *3.2.7 Perceived Loss of Ownership Risk*

When consuming fast fashion, individuals use clothing mainly to convey their identity to society (Akdemir, 2018). Comprehending identity formation in social settings is therefore seen as fundamental to understanding the motives of fashion consumers (McNeill & Venter, 2019). In fact, clothing, while fulfilling a basic need, has become a socially acceptable means of distinguishing oneself from others whilst conveying similarity to them (Thompson & Haytko, 1997). What is more, fashion is an artefact of one's extended self, since consumers use garments to develop, confirm and express their identity socially (Belk, 1988). As a result, consumers develop strong emotional connections to these goods, which could explain the significance of owning fashion items in their lives (Belk, 1988).

The concept of CFC asks individuals to put these emotional attachments to garments aside, as accessing and sharing presuppose a commonality of ownership (Pedersen & Andersen, 2015). Consequently, this practice requires either the temporary or permanent relinquishment of control over artefacts, which is why loss of ownership may be perceived as a risk by consumers if they intend to adopt forms of CFC (Armstrong et al., 2015; Armstrong et al., 2016; Borg, et al., 2020; Catulli, 2012; Tukker & Tischner, 2006). Literature, however, emphasizes that today's generation prefers a liquid relationship with property. Burdened by ownership and seeking freedom from it, consumers find access-oriented CFC models quite tempting (Botsman & Rogers, 2010; Bardhi & Eckhardt, 2012). Besides, and as highlighted by Armstrong et al. (2015), fashion consumers get some of their fulfilment from emotions associated with change which is conveniently offered by FRSs.

Still, as clothing serves the individual for the expression of identity and uniqueness, ownership includes an emotional component that service may not completely substitute (Armstrong et al., 2015; Gentina, 2014). Ownership is therefore associated with both a sense of control and social status. The former enables self-presentation by controlling impressions others make of them. The latter facilitates consumers to fulfil their internal needs for self-esteem. Thus, those qualities may not be adequately replaced by a service such as renting as it involves only a short-term possession of goods (Armstrong et al., 2015). Catulli (2012) supports this argument by claiming that dematerialization caused by CFC concepts might negatively affect the need for self-expression. The author further finds the presence of a social stigma in which renting is only considered for less affluent people. Collectively, loss of ownership is associated with loss

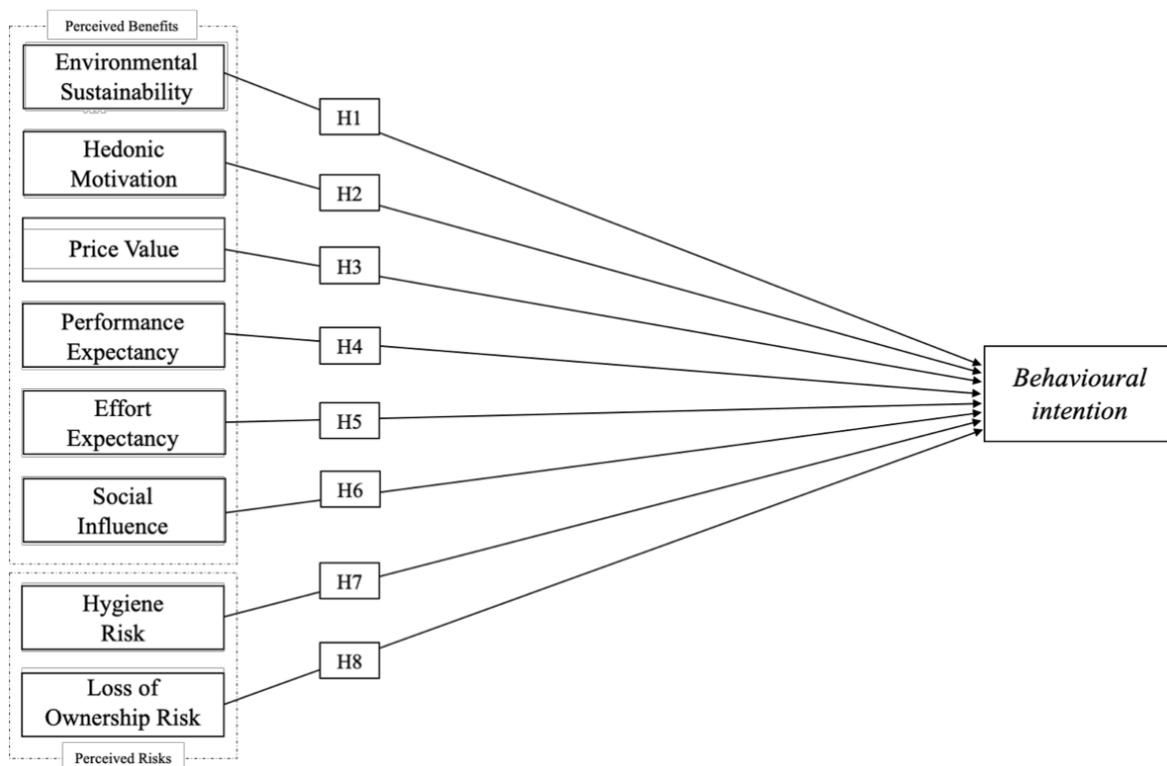
in control, which may result in a misrepresentation of the consumer's social status and social stigma. Therefore, consumers who are concerned about other people's evaluation may not adopt FRSs because of the perceived risk of ownership loss. In fact, the social nature of individuals and their need for acceptance makes this risk a prominent barrier in CFC (Fritsche, Barth, Jugert, Masson & Reese, 2018).

Despite stemming from a change in consumer views of ownership, literature suggests that P2P-FRS adoption is still inhibited by the risk of losing possession. In fact, Belk (1988) highlights the importance of ownership in fashion particularly as consumers express themselves through their clothes. Renting apparel is also often linked to fear of social stigma and a loss of status. Based on the aforementioned, we propose the below hypothesis *H8*.

***H8***: *Loss of ownership risk has negative relationship with a consumer's intention to adopt fast fashion rental services in digital peer-to-peer platforms.*

### 3.3 Conceptual Framework

Based on the literature review and rooted in the UTAUT2 model, this study proposes that each of the perceived benefits and risks predicts consumer adoption intention in P2P-FRS platforms in the fast fashion segment. Below, in *Figure 5*, is a visualisation of the eight proposed hypotheses.



*Figure 5: Conceptual Framework (own illustration)*

- H1:** *Environmental sustainability has a positive relationship with a consumer's intention to adopt fast fashion rental services in digital peer-to-peer platforms.*
- H2:** *Hedonic motivation has a positive relationship with a consumer's intention to adopt fast fashion rental services in digital peer-to-peer platforms.*
- H3:** *Price Value has a positive relationship with a consumer's intention to adopt fast fashion rental services in digital peer-to-peer platforms.*
- H4:** *Performance expectancy has a positive relationship with a consumer's intention to adopt fast fashion rental services in digital peer-to-peer platforms.*
- H5:** *Effort expectancy has a positive relationship with a consumer's intention to adopt fast fashion rental services in digital peer-to-peer platforms.*
- H6:** *Social influence has a positive relationship with a consumer's intention to adopt fast fashion rental services in digital peer-to-peer platforms.*
- H7:** *Hygiene risk has a negative relationship with a consumer's intention to adopt fast fashion rental services in digital peer-to-peer platforms.*
- H8:** *Loss of ownership risk has a negative relationship with a consumer's intention to adopt fast fashion rental services in digital peer-to-peer platforms.*

## 4 Methodology

*The following chapter presents the methodological approach of this thesis. First, we begin by discussing ontology and epistemology as components of our research philosophy. Secondly, our research approach is explained, followed by the sampling process, data collection method and variable operationalisation and measurements. Finally, we evaluate the reliability, validity and replicability of our study.*

### 4.1 Research Philosophy

While the relationship between theory and data has been extensively debated, Easterby-Smith, Thorpe, Jackson and Jaspersen (2018) contend that its determination is essential given the effect it has on the quality and design of the study. Knowledge of the research philosophy helps the researcher clarify what design is needed, including the data required as well as the way it should be collected and analysed. It further provides knowledge of the limitations of certain approaches, enabling the researcher to recognize which designs would work and which should be avoided (Easterby-Smith et al., 2018). As such, the research philosophy serves as a basis for guiding the methodology. That being said, the following sections cover the ontological and epistemological philosophical foundations guiding our research.

#### 4.1.1 Ontology

Ontology is the study of being and answers the question “what entities exist?” (Hunt & Hansen, 2008). In other words, it relates to the philosophical assumptions about the nature of reality and existence (Easterby-Smith et al., 2018). Ontological positions differ based on the nature of the sciences studied, which are essentially categorised into natural and social. Although there exist certain parallels between the two, differences are clearly present and subsequently lead to different ontological positions applied in each field (Easterby-Smith et al., 2018). As this research aims to study adoption intention of P2P-FRSs among consumers, it falls more so within the realm of social sciences whose focus is on the behaviour of people as opposed to inanimate objects (Easterby-Smith et al., 2018). In social sciences, ontological debates primarily revolve around three positions: nominalism, relativism and internal realism. Nominalism assumes that there is no truth and that facts are merely human creations. Relativism, on the other hand, contends that several truths exist with facts depending on an observer’s point of view. Finally, internal realism asserts that while truth exists, it remains vague and although concrete facts are available, they are often difficult to access (Easterby-Smith et al., 2018).

As this research aims to provide not only theoretical but also managerial contributions for companies implementing P2P-FRSs, an internal realist approach offering a single truth is necessary. Furthermore, the existence of adoption intention but the difficulty of accessing it

further asserts this study's internal realist position. Nevertheless, it is worth mentioning that the operationalisation of social concepts is difficult for internal realists as it is not possible to attain a measure of the "true" phenomenon (Easterby-Smith et al., 2018). Internal realism contends that while the truth exists, one cannot claim with certainty that the study represents it (Hunt & Hansen, 2008). In fact, a realist approach argues that what is measured in research is not the "truth" but rather a representation of it based on the concepts studied (Hunt & Hansen, 2008). That being said, this research, rooted in internal realism, aims to provide a measurement of the constructs utilised and the reality of the relationships between them.

#### *4.1.2 Epistemology*

While ontology relates to the nature of reality, epistemology studies the nature of knowledge (Hunt & Hansen, 2008). Epistemological assumptions determine the way we learn about physical and social worlds and determine the means in which data is collected and analysed (Easterby-Smith et al., 2018). Bryman and Bell (2011) maintain that epistemology, broadly speaking, can be divided into a positivist approach and a social constructionist. The former contends that social reality exists externally and should be measured objectively instead of being inferred. The latter, on the other hand, is interpretive in nature and asserts that social reality is constructed by people individually and should be studied by looking into verbal and non-verbal communication (Bryman & Bell, 2011).

In that sense, ontology and epistemology are connected with the choice of one affecting the other. In fact, social constructionism generally follows a nominalist ontology while positivism is linked to realism (Easterby-Smith et al., 2018). Since this study follows internal realism, it embraces the epistemological positivist approach contending that knowledge is only significant when attained through observations of reality. What is more, it is worth noting that there are varying levels of positivism with "strong positivism" relying primarily on experimentation and subsequently rejecting alternative explanations (Easterby-Smith et al., 2018). Nonetheless, as our ontological foundation maintains that reality cannot be directly accessed and given the social nature of the study, our research does not follow a strong positivist approach. It does; however, objectively measure the social world, since observations and opinions are prone to subjectivity and prejudice (Burns & Burns, 2008).

To ensure proper implementation of the positivist approach, certain principles need to be applied (Bryman & Bell, 2011; Easterby-Smith et al., 2018). To begin with, the independence of the observer is crucial to ensure objectivity (Bryman & Bell, 2011; Burns & Burns, 2008; Easterby-Smith et al., 2018). Second of all, and as highlighted by Bryman and Bell (2011), a positivist research needs to be conducted in a value-free manner meaning that the concepts under study should be objectively determined. This is carried out in our case by carrying out a literature reviews allowing us to synthesize the assessed constructs. The study is, furthermore, conducted based on hypothesis testing and a subsequent deductive approach (Easterby-Smith et al., 2018). Additionally, and as argued by Burns and Burns (2008) and Easterby-Smith et al. (2018), concepts in a positivist approach need to be operationalised in simple terms and

findings should be generalised statistically. As such, a quantitative research design is applied, whose details are discussed in the following sections.

## 4.2 Research Approach

This section presents the study's research approach. Based on the philosophical foundations, a deductive approach is adopted. Furthermore, as the sample is taken at one point in time for a single set of respondents, the research is cross-sectional in nature. Finally, as this study aims to assess the relationships between perceived benefits and risks and the extent to which they predict adoption intention, a multiple linear regression analysis is conducted.

### *4.2.1 Deductive Research Approach*

Making effective decisions in the business world, as argued by Burns and Burns (2008), necessitates both deductive and inductive research approaches. However, the concept of CFC has already been widely explored in qualitative studies, which is why we do not apply an inductive approach and do not aim for developing new theories (Armstrong et al., 2015; Armstrong et al., 2016; Becker-Leifhold & Iran, 2018; Borg et al., 2020; Hiller, 2011; Park & Armstrong, 2017). Instead, we embrace a deductive approach to examine the drivers behind P2P-FRSs adoption, as our theoretical framework and posed hypotheses already suggest. More specifically, the applicability of existing theories is tested in the context of P2P-FRSs, thus our hypotheses are formulated on the basis of previous research, as stated in *chapter 3.2*. Our decision is supported by Burns and Burns (2008) who claim that a quantitative study, thus a deductive approach, should be followed in later stages of research. Additionally, the authors assert that a quantitative method provides more efficient and accurate estimations of relationships among the constructs under study while potentially omitting some contextual insights. Nonetheless, the intended goal is to deduce conclusions from the pre-defined hypotheses that can be generalized to a certain extent.

### *4.2.2 Cross-Sectional Research Design*

In the present study, a cross-sectional research design is utilized, as it is common in studies of a positivist nature (Easterby-Smith et al., 2018). A cross-sectional design, also known as a sample survey research design, enables scholars to examine respondents at a particular point in time, thereby allowing for a comparison of differences (Easterby-Smith et al., 2018). This is particularly suitable when the purpose of the study is not only descriptive but also predictive in nature (Burns & Burns, 2008). As our study is predictive in terms of assessing the underlying relationships between benefits and risks and behavioural intention, a cross-sectional analysis seems appropriate. Although a longitudinal design would have been preferable in order to assess why observed patterns are prevalent (Easterby-Smith et al., 2018), it is not applied given the time constraints. Thus, we conduct a single cross-sectional design, where data is obtained

from a single sample once (Burns & Burns, 2008). In other words, in our study we examine consumers at a particular moment and compare observations within the given research sample.

### *4.2.3 Multiple Linear Regression Analysis*

In order to test the constructed conceptual framework, a multiple linear regression analysis is conducted. Regression is a “statistical procedure for analysing associative relationships between a metric dependent variable and one or more independent variables” and serves several purposes (Malhotra, 2010, p.536). To begin with, regression establishes whether a relationship exists between the independent variables (IVs) and the dependent variable (DV). It further determines the strength of this relationship by quantifying the amount of variation in the DV explained by the IVs (Malhotra, 2010). Furthermore, regression equations, determine the structure of the relationship between the variables and allow the researcher to predict the value of the DV from known values of one or several IVs (Burns & Burns, 2008; Malhotra, 2010). The accuracy of this prediction relies on the strength of the correlations that exist. That being said, a multiple linear regression analysis is well-suited for the purpose of this research in determining the extent to which the hypothesized perceived risks and benefits predict adoption intention in P2P-FRS platforms. It is worth mentioning here that regression is not synonymous with causality as it is concerned solely with the nature and strength of the association (Burns & Burns, 2008; Malhotra, 2010).

## 4.3 Sampling Process

Referring to Sekaran and Bougie (2016), the sampling process consists of a set of three distinct steps: defining the target population, determining the sampling design, and specifying the sample size. We discuss each of these steps in the following sections.

### *4.3.1 Target Population*

Burns & Burns (2008) define a sample as “a representative portion of the population which is selected for a study” (p.195). For the present confirmatory research, a representative sample of individuals of any gender and of 18 years and older is targeted. As the study is conducted online, no geographical boundaries were imposed. This is reasonable given the research’s focus on fast fashion whose brands are predominantly global (Yoon et al., 2020). Besides, the defined target population with its wide age range is selected in order to include every potential FRSs adopter. As a matter of fact, and in order to significantly diminish environmental pollution, it is necessary that genders of all ages change their clothing consumption behaviour.

### 4.3.2 Sampling Design

Various studies show that conducting probability sampling with the aim of finding generalisable results is quite challenging when using web-based surveys (Bell, Bryman & Harley, 2018). The dependency on internet access for the given data collection instrument is one main reason (Easterby-Smith et al., 2018). In fact, individuals who use the internet are more likely to be younger (Lenhart, Purcell, Smith & Zickuhr, 2010). Thus, this sampling method cannot give every sample element an equal chance to be included (Burns & Burns, 2008), which is the main criterion for successfully performing probability sampling. That being the case, convenience sampling is applied (Bryman & Bell, 2011). This is a commonly used form of non-probability sampling whereby subjects are selected on the basis of their accessibility. The unequal representation generated from utilising this sampling method does not allow us to calculate the sampling error, since the true mean and sample mean cannot be computed (Burns & Burns, 2008). Thus, the findings of this study cannot be statistically generalized to the whole population (Easterby-Smith et al., 2018).

That being said, some researchers consider convenience sampling to be flawed due to the low representation of the sample (Bryman & Bell, 2011). Meanwhile, other scholars emphasise that this design can be representative, at least when it is aligned with the study purpose (Easterby-Smith et al., 2018). Since our target population is not limited with regards to gender, age or nationality, and given the COVID-19 pandemic, the choice for convenience sampling is favourable. Other positive aspects of this sampling design further supporting our choice are the cooperative nature and accessibility of the sampling units, as well as the time efficiency and the low cost (Malhotra, 2010).

### 4.3.3 Sample Size

When determining the sample size, the research field or type of study are important components to consider. Malhotra (2010) contends that in problem solving and test-marketing studies, a sample size between 300 and 500 is required while maintaining a minimum size of  $n=200$ . Since this research aims to assess the significance of perceived benefits and risks in predicting consumers' adoption intention of P2P-FRS platforms, the sample size presented by Malhotra (2010) is applicable.

A statistical approach on the other hand, utilizes the confidence interval (Malhotra, 2010) as per the below:

$$n = \frac{\pi(1 - \pi)(z)^2}{(D)^2}$$

In this formula,  $\pi$  represents the population proportion,  $z$  corresponds to the value associated with the confidence level and  $D$  is the precision level. As this study does not specify a target population, estimating the population proportion would be difficult. Nonetheless, in such a case, Malhotra (2010) maintains that applying a  $\pi$  value of 0.5 is recommended since it leads to the maximum size for the sample. We aim for a confidence level of 95 percent, as it is most

commonly adopted (Malhotra, 2010), which corresponds to a z level of 1.96. Finally, the desired precision level is set such that the allowable interval  $\rho - \pi = \pm 0.05$ . This results in the below:

$$n = \frac{0.5(1 - 0.5)(1.96)^2}{(0.05)^2} = 384.16$$

Rounded to the highest integer, this yields a sample size of 385.

Moreover, Lee and Huang (2020a) who look into the sustainability aspect of FRSs, use a sample size of n=300 in their study. As their study is also based on a quantitative approach and falls within the area of FRSs, it is relevant for our study and confirms the aforementioned sample size.

Combining these insights and considering the limited time frame, money and availability of observations, we aim for a sample size of 350. In parallel, we set the preferred number of participants to be polled higher, at 550, to ensure that the threshold of 350 respondents will be met by generating a buffer for missing or frivolous answers.

## 4.4 Data Collection

The subsequent subsections, are devoted to the data collection method, including the data collection instrument, the pre-testing, design and distribution of the questionnaire, followed by the eventual number of respondents. The empirical data collection was conducted through a main survey using the digital polling tool LamaPoll.

### 4.4.1 Data Collection Instrument

Saunders, Lewis and Thornhill (2009) argue that a survey strategy is most commonly used in a deductive research setting, often in business and market research. Fittingly, and due to the current circumstances given the spread of the COVID-19 pandemic, we chose a web-based self-completion questionnaire as the data collection tool for the present study (Easterby-Smith et al., 2018). This instrument scores by ensuring the anonymity of participants thus increasing the respondents' sense of confidentiality, which, according to Burns and Burns (2008), leads to increased veracity of responses. Furthermore, the tool allows for interactivity, personalised questions, the provision of explanations, the collection of more specific information and the elimination of questions based on previous answers, leading to further advantages compared to other instruments (Easterby-Smith et al., 2018). The software used to set up the questionnaire for the study was Lamapoll. Our decision to work with this professional online survey software was easily made due to the vast number of features it offers, such as the randomization of questions and the easy data transmission to SPSS. Besides, the program aligns with data privacy standards by allowing the anonymization of respondents. Moreover, the survey tool offers a visually appealing design that is optimised for different devices tool rendering it user-friendly. This aspect is of particular relevance since the visual appearance of the questionnaire impacts the response rate, as Burns and Burns (2008) claim.

#### *4.4.2 Pre-testing of Questionnaire*

Malhotra (2010) maintains that pre-testing a questionnaire is a vital and simple way to eliminate potential problems and errors. Additionally, it helps remove ambiguities, examine the adequacy of the range of response options and test the instructions (Burns & Burns, 2008). In fact, Malhotra (2010) asserts that conducting pre-tests increases the validity and reliability of a study and is most effective when executed face-to-face in smaller test settings. The author also mentions that the pre-test should be carried out in a similar context to that of the actual survey. Thus, for this paper, we conducted an online pilot study by running a small trial with a limited number of people, in order to test and optimize our questionnaire design. In total, 17 respondents pre-tested our questionnaire through a “pre-version” on LamaPoll in late April. In doing so, we asked people from different cultural and professional backgrounds and age groups to participate, in order to ensure that the concepts included were not understood by one particular group of people only (e.g., business administration background). As highlighted by Perneger, Courvoiser, Hudelson and Gayet-Ageron (2015, p.148), the pre-test should be stopped when “no (important) problem is detected”. The first seven respondents provided us with important comments with regards to the clarity and ease of use of the survey, which we reflected. Following that, we did not receive comments that indicated there was a problem with the survey. We, therefore, stopped our pre-test at 17 respondents.

The respondents were asked to complete our survey and then provide constructive criticism on how they understood and grasped the used items. For the respondents who participated, most of the items were easy to understand. However, a few misconceptions occurred with some statements, mainly because the topic was new or unfamiliar to them. Therefore, the main feedback we received was to include a concise introduction of FRSs with all relevant background information, especially pertaining to peer-to-peer operations since it was the topic of our survey. In addition, we deleted one statement on behavioural intention: “I would be willing to recommend the fast fashion rental service to my friends” as well as one statement on price value: “At the current price fast fashion rental services provide a good value.” We did this, because the majority of the respondents were confused as to why they should recommend or know the price for a service they have never used before. Moreover, we changed four negative statements regarding perceived hygiene risk into positive ones, to ensure coherence along the entire survey and to increase the comprehensibility of the statements.

Besides, the pre-test indicated that it takes a respondent approximately six to ten minutes to fill out our questionnaire. Since this is rather lengthy, we decided to utilize three different types of rating questions (options, slider and smiley) to make the survey more engaging. Additionally, we agreed on offering an incentive for people to complete it, by drawing three Amazon vouchers with a total value of 200 SEK (1x 100 SEK, 2x 50 SEK). Each respondent could participate by providing their email address at the end of the questionnaire. We will notify the three randomly selected winners in June.

### 4.4.3 Questionnaire Design

The complete questionnaire design used for the empirical data collection can be found in *Appendix 1*. The survey was designed by merging existing scales from previous studies and adjusting items wherever necessary to match the context of the present research.

First of all, building trust is crucial for improving survey response rates. Thus, ensuring confidentiality and security of data is of great importance as per Easterby-Smith et al. (2018). Indeed, the authors maintain that increasing concerns about privacy and the handling of personal data may reduce the number of participants, particularly today when consumer privacy is a hotly debated topic. That being said, and given that we used a survey for empirical data collection, we had to ensure to protect the interest of the participants. Hence, we followed the GDPR guidelines by providing anonymity and showcasing that nobody is coerced into filling out the questionnaire. Additionally, respondents had to give their consent in order to participate in our survey.

The survey started off by introducing its purpose, namely, to gather insights about the predictors behind consumers' adoption of P2P-FRSs in the fast fashion segment. We deliberately chose a rather vague description of the research goal in order not to overwhelm participants with detailed information. Instead, we decided to provide a more comprehensive explanation of P2P-FRSs after the questions on participants' demographic characteristics (e.g., age, gender, current occupation, highest level of education achieved) in order to prepare respondents for the topic-specific questions to come. Thereby we kept the description as neutral as possible, meaning that positively and negatively charged lexicons were avoided to prevent consumer bias.

Moreover, we aimed to design the questionnaire in a way to minimize the chances of error. As a matter of fact, all questions were featured with a forced response function to ensure that no missing values would be included in the final data set. To further mitigate possible respondent bias, the language of the survey and the phrasing of the statements were carefully considered. More specifically, all questions were closed-ended and non-leading to minimize mistakes and confusion (Lietz, 2010). In addition, we limited complexity by avoiding jargon and by making sure that every statement only conveyed a single idea (Malhotra & Birks, 2005). Besides, questions concerning the same construct were grouped together.

The first blocks of questions addressed the perceived benefits and risks of P2P-FRSs which serve as the predictors in the analysis. The assessed predictors were presented in the following sequence: environmental sustainability, hedonic motivation, price value, performance expectancy, effort expectancy, social influence, perceived hygiene risk and perceived loss of ownership risk. Finally, a set of questions pertaining to a consumer's intention to adopt P2P-FRSs were posed. This stated order was chosen to gradually shift towards more sensitive and subject-specific topics as recommended by (Malhotra & Birks, 2005). The survey closed with the option to provide an email address in case participants wanted to participate in the draw for the vouchers. A final page where we thanked the respondents for their help formed the end of the questionnaire.

#### 4.4.4 Questionnaire Distribution

To reach the targeted sample size, we distributed the web-based self-completion survey via our network and various digital channels, including social media and forums. Hence, we selected respondents primarily based on their availability as well as their willingness to respond (Easterby-Smith et al., 2018), which corresponds to convenience sampling (Burns & Burns, 2008).

First of all, we made use of our own networks by addressing friends via WhatsApp, professionals via LinkedIn as well as acquaintances via Facebook and Instagram. In doing so, we either reached out directly to individuals through messaging or created creative posts and stories to capture the attention of the community. Besides, we grasped people's attention by highlighting the incentive, trying to reach those who were acting out of self-interest in addition to the already willing participants from our network. Additionally, we asked our acquaintances to share our survey with their networks, which can be considered as snowball-sampling (Easterby-Smith et al., 2018).

Moreover, the questionnaire was shared on a page on Reddit, known as "r/SampleSize: Where your opinions actually matter", which gave us access to a more diverse group of people with a total of 164k participants. The page allows sharing of polls and surveys for research purposes with the aim of obtaining responses. In parallel, the questionnaire was shared in two Facebook groups, "Student Survey Exchange" with 16.8k members and "The Research Survey Exchange Group" with 8.5k. Both groups follow the same purpose of providing a space for members to support each other in their data collection. The basic approach is to first complete the survey from someone else, before commenting your own questionnaire under it, which provides two-fold advantages. First of all, both parties benefit by increasing their respondents, but additionally feedback can be exchanged, leading to further improvement of the survey. An illustration of this approach, together with examples of the aforementioned posts and stories can be found in *Appendix A.2*.

All groups were chosen based on our judgement and can thus be considered as a judgemental sample. However, we deliberately decided not to post the survey on groups focused on sustainability or CC, as this would most likely have influenced our results. Instead, and in an attempt to avoid sampling bias, we shared our questionnaire in groups with a broader membership base to avoid targeting students, females, or highly educated people. This wider range of respondents (Easterby-Smith et al., 2018) allowed us to capture more reliable responses (Burns & Burns, 2008).

#### 4.4.5 Number of Respondents

We checked the number of respondents several times throughout the entire data collection period (3<sup>rd</sup> to 7<sup>th</sup> of May) to see if our targeted minimum sample size of  $n=350$  had been already reached. By the 4<sup>th</sup> of May, we had already achieved our target sample by attaining 367

respondents. However, since we aimed for 550 respondents as a buffer for possible incomplete or fraudulent responses, we kept the survey running till the 7<sup>th</sup> of May.

In total, at the end of our data collection period, we registered 743 participants who started it. However, 146 respondents dropped out before they had completely filled out the questionnaire, which corresponds to 20% of the participants. Subsequently, we had a response rate of 80%, totalling 597 fully completed questionnaires. Besides, our pre-tests showed that respondents took an absolute minimum of 5 minutes to complete the questionnaire. Therefore, we filtered out those who took less time to ensure that no dubious participants were included in our data set. In addition, we excluded everyone who answered our control question (“This is a control question. In the following scale from 1 to 7, choose the number 1”) erroneously, as we assume that those responses are not reliable. For these respondents, the incentive we offered may have been a reason to complete the survey.

Finally, after the two aforementioned selection steps, our final data set consisted of 362 respondents. Out of these 362 respondents, no one was under 18 years of age and most respondents held an American, Swedish, Austrian, German or Lebanese nationality. The sampling results are illustrated in *Table 1*.

*Table 1: Sampling results (own table)*

Target Population	Sample results
Above 18 years old	18-24 (23.5%), 25-34 (64.6%), 35-44 (9.4%), 45+ (2.5%)
Areas	Europe (55.8%), North America (30.7%), Asia (10.7%), Others (2.8%)

## 4.5 Operationalisation of Variables and Measurements

Variables need to be operationalised in order to translate abstract constructs into observable and measurable entities (Burns & Burns, 2008). In fact, the constructs of the conceptual framework must be defined in such way that they can be measured, empirically and quantitatively. Scales, as per DeCarlo (2018) should be utilised for this purpose. The author defines a scale as a measure that consists of several questions or items. He further contends that, unlike indices, scales are designed to consider different levels of intensity of the individual items. Due to reliability and validity concerns, it is recommended to use already developed scales for the operationalization of variables (DeCarlo, 2018). However, given the lack of a previous study combining all the variables of this research, it was necessary to retrieve relevant scales from several academic papers and adapt them where necessary to the context of the present study. In doing so, a minimum of three and a maximum of four items per variable were employed.

In measuring all items, a seven-point non-comparative scale, ranging from 1 to 7, was utilised given it proven properties in the research field (Lietz, 2010). The seven-point Likert scale, where “1” stands for “strongly disagree” and “7” stands for “strongly agree”, allows measuring

the extent to which respondents agree or disagree with given statements regarding the variables (Sekaran & Bougie, 2016). In other words, a respondent's agreement can be translated into a positive attitude towards the topic under study, whereas a disagreement expresses the opposite (Easterby-Smith et al., 2018). Our decision to use a seven-point Likert scale was further driven by the fact that a preferable range of response options lies between five and eight (Lietz, 2010). What is more, Lietz (2010) maintains that a seven-point Likert scale does not force respondents to hold an opinion when they feel neutral towards the statement since it provides them with a midpoint value to select. For the aforementioned reasons, the seven-point Likert scale was applied for the variables in this study. A description of the operationalisation of each of our nine variables follows.

*Behavioural intention*, which served as the DV in our conceptual framework, is defined as a consumer's expressed desire to use a service in the near future (Arts, Frambach & Bijmolt, 2011). In our study, it was measured as a general intention to adopt P2P-FRSs in the fast fashion segment, for which initially three items from Baek and Oh (2021) and one item from Lang et al. (2019) were adapted. However, after the pre-test, one item from Baek and Oh (2021) was dropped due to ambiguity among participants, resulting in a total of three items for the assessment of the construct. "The likelihood that I would use fast fashion rental services is high" was one of the final three items employed for this variable.

*Environmental sustainability*, the first IV, follows the definition of Hamari et al. (2016) who characterize it as a motivation related to green consumption and ecological conservation. This construct was assessed with four items from Hamari et al.'s (2016) study conducted on CC. Due to the familiarity of the research topic, the statements only needed to be slightly changed by replacing the term CC with FRSs. Items, as for instance "Fast fashion rental services help to save natural resources", allowed us to observe the given variable.

The operationalization of *hedonic motivation*, the second IV, was based on Venkatesh et al. (2012), who define it as "the fun or pleasure derived from using a technology" (p.161). The construct of hedonic motivation was primarily based on a three-statement scale in literature (Alalwan et al., 2016; Araújo Vila et al., 2021; Gao et al., 2015; Gunawan, Muchardie & Liawinardi, 2019; Piarna et al., 2020; Slade et al., 2015; Venkatesh et al., 2012). This explains why we also left it at this number, with one of the items included being "Using fast fashion rental services is fun" (Venkatesh et al., 2012).

The third IV, *price value* is defined as consumers' cognitive trade-off between the perceived benefits of the services and the monetary costs for using them (Venkatesh et al., 2012). Price value is mentioned extensively in CFC literature as a strong adoption driver (Armstrong et al., 2015; Becker-Leifhold & Iran, 2018; Lee & Chow, 2020; Zamani et al., 2017). The construct was also operationalised with three adapted items of Venkatesh et al. (2012) and an additional item from Singh and Matsui (2017) that specifically asked if consumers "can save money by using fast fashion rental services." However, after the pre-test, one item provided from Venkatesh et al. (2012) was deleted, as it caused confusion among the participants, resulting in a total of three items for the given construct.

*Performance expectancy*, the fourth IV is defined as "the degree to which using a technology will provide benefits to consumers in performing certain activities" (Venkatesh, et al., 2012,

p.159). In measuring this IV, we utilized a three-item scale adapted from Venkatesh et al. (2012). The construct was further supplemented with a fourth item by Pascual-Miguel, Agudo-Peregrina and Chaparro-Peláez (2015) which states: “I think fast fashion rental services is valuable to me”.

Pascual-Miguel et al. (2015) also provided us with four items for the fifth IV *effort expectancy*, which, per Venkatesh et al. (2012) is defined as “the degree of ease associated with consumers’ use of technology (p.159). All items were taken from the original study and modified only in relation to the topic of our research, namely from online purchases to FRSSs. An example of the items measuring the given construct is “I would find the fast fashion rental service platform easy to use.”

*Social influence*, which according to Venkatesh et al. (2012, p. 159) is defined as “the degree to which a person perceives that significant others (e.g., family and friends) believe they should use a particular technology” represents our sixth IV. It was measured with four items, three of which were developed by Venkatesh et. al (2012), and an additional item from Kaur, Osman, Bakar, Fazli and Singh (2020). One of the questions for social influence was “People who are important to me think I should use fast fashion rental services.”

*Hygiene risk*, our seventh IV, refers to the possibility of contamination through clothes (Silva, Santos, Duarte & Vlačić, 2021) and is currently a relevant variable due to the ongoing pandemic. It was measured using four items, three of which were adapted from a recent study by Silva et al. (2021). The last statement was obtained and adapted from Lang et al. (2019). However, all those items needed to be repolled from negative to positive, in order to provide consistency for the respondents along the entire survey. An example of the items used to measure the variable was “Rented clothes are as hygienic as new clothes”.

The eighth IV pertaining to the *risk of losing ownership (LO)*, which opposes the consumer trend from ownership to access, is defined as the risk consumers perceive when giving up ownership of apparel (Park & Joyner Armstrong, 2019b). For the operationalization of this variable, a scale from Park and Joyner Armstrong (2019b) was employed. As their study specifically examines whether no-ownership works for the apparel sector, no adaptation of the items was necessary. However, a reduction of the statements had to be made, which is why a scale with only four items was adopted from the original source. Thereby, “Owning my clothing items (instead of renting them) is important to me” was one of the items utilised.

A table presenting each of the nine variables with the corresponding survey items can be found in *Appendix A.3*.

## 4.6 Research Quality Criteria

The meaning of reliability and validity varies according to the epistemological continuum (Easterby-Smith et al., 2018). Since we follow a positivist approach, these two quality criteria are examined accordingly in this section. In addition, the replicability of our study is reviewed.

### 4.6.1 Reliability

Reliability, according to Sekaran and Bougie (2016), is defined as “an indication of the stability and consistency with which the instrument measures the concept” (p.223). Thus, to assess the reliability of a study, Malhotra (2010) maintains that the internal consistency must be tested. Internal consistency as such, evaluates the homogeneity of items or in other words, how strongly a given set of items is related (Malhotra, 2010). Although our study drew on items from peer-reviewed papers, which ideally increases the level of reliability (Easterby-Smith et al., 2018), the internal consistency of items was examined by calculating the Cronbach’s Alpha coefficient. In fact, the Cronbach’s Alpha coefficient measures “the degree that items are independent measures of the same concept”, as stated by Sekaran and Bougie (2016, p.224). The computed Cronbach’s Alpha value, thereby, lies between 0 and 1. However, and as recommended by Burns and Burns (2008) as well as Bryman and Bell (2011), an accepted level of internal consistency is met when the alpha reaches the threshold value of  $\alpha = 0.7$ .

The Cronbach’s Alpha values for the items of this study all exceeded 0.7. What is more, the majority of the items reached an alpha value of 0.8 or 0.9 which, according to Burns and Burns (2008), is considered as highly acceptable for the assumption of homogeneity. These results, thus, demonstrate that all variables were effectively represented by the chosen survey items. Consequently, no item had to be dropped from the scales. An overview of the Cronbach’s Alpha values for all items used in the survey can be found in *Appendix A.3*.

### 4.6.2 Validity

According to Bell, Bryman and Harley (2018, p.174), validity is concerned with “whether or not a measure of a concept really measures that concept”. Burns and Burns (2008) differentiate between two types: internal and external with the former acting as a prerequisite for the latter. That being the case, we focus on internal validity in the following discussion. Internal validity addresses the causality in the relationship between the DV and the IV(s) and refers to the certainty that results are credible and true and that the conclusions are correct (Bryman & Bell, 2011). Types of internal validity encompass content, construct, and convergent validity (Bryman & Bell, 2011). To strengthen all three types, several steps were taken.

For content validity, pre-tests were conducted. As previously explained in the section on pre-testing (4.4.2), this enabled us to check whether our pre-testers were able to understand the concepts correctly. By responding to the obtained feedback, the comprehensibility of the questionnaire was ensured, which consequently led to an increased internal validity (Burns & Burns, 2008). Secondly, our survey assured anonymity, so respondents were more inclined to answer truthfully, resulting in more valid responses. However, it is worthwhile noting that it cannot be avoided that some participants might have answered in a socially expected way (Easterby-Smith et al., 2018). Lastly, by eliminating non-response errors, unserious responses and participants who did not align with our target group, we increased the likelihood of measuring what we intended to measure. Furthermore, and as our pre-testers noted, completing the survey with focused attention ranged between six and ten minutes. However, as some

participants significantly went over that time frame, we can potentially assume that they were preoccupied with other tasks and consequently may not have been focused enough, which may have affected the validity of our results.

For the purpose of construct validity, which refers to the test or scales used to adequately measure constructs (Burns & Burns, 2008), we captured our measurements from various peer-reviewed articles. Thereby, and as extensively described in the operationalisation of the variables and measurement chapter (4.5), we examined how the researchers formulated their items and adopted them appropriately to our context. Moreover, and as aforementioned, these studies demonstrated high Cronbach's alpha values for the measured items, which is crucial for supporting construct validity. Besides, since the statements pertaining to hygiene risk were phrased affirmatively for survey consistency reasons, this variable was transformed in SPSS to ensure it was being measured as a risk and guarantee construct validity.

In addition, convergent validity of all variables was tested, as it indicates whether the observed items adequately measure the specific construct (Jackson, Gillaspay Jr. & Purc-Stephenson, 2009). One way to assess convergent validity is the computation of factor loadings. Factor loadings, as defined by Hair, Black, Babin and Anderson (2010) are the “correlation between the original variables and the factors, and the key to understanding the nature of a particular factor”. Our factor analysis as depicted in *Appendix A.3*, showed that the factor loadings for all items were above 0.5, the recommended threshold for assessing factor loading strength (Byrne, 2010; Hair et al., 2010), further supporting the internal validity of our research.

### *4.6.3 Replicability*

The world of research advocates for the replicability of studies (Bryman & Bell, 2011). Therefore, scholars need to ensure that it is feasible for others to replicate their study and consequently confirm results. In doing so, it is crucial to report procedures and findings in a detailed and accurate way (Bryman & Bell, 2011). For this reason, and as already demonstrated in the section on the operationalisation of variables and measurements (4.5), we explained in great detail where the scales and associated items in our survey come from and why they have been chosen. Furthermore, we specifically guide readers and potential future researchers through our data analysis by explaining the methods and procedures thoroughly, simply and transparently. By doing so, the study's replicability, readability and comprehensibility are improved.

# 5 Analysis and results

*This chapter provides an overview of the conducted analysis and reports the results obtained, which are briefly discussed with regard to the hypotheses formulated in section 3.2. In doing so, the data preparation and the descriptive results of the study are presented first, followed by the assumption check relevant for the chosen analysis method. Finally, the main analysis, consisting of a multiple linear regression, is applied to test the eight hypotheses and assess whether or not they are supported.*

## 5.1 Data Preparation

The program used for data collection, LamaPoll, allowed us to transfer the data directly into the statistical software platform SPSS, which was chosen for the analysis of the gathered data. Thus, the risk of human errors was limited (Bell, Bryman & Harley, 2019). After successfully importing the data, it was cleaned by checking for extreme errors, such as non-responses, frivolous responses and participants not aligning with our predefined target group. As a next step, each variable was labelled according to the item and values suitable to the seven-point Likert scale deposited, in order to facilitate the analysis process. In this regard, special care was taken for the items measuring the perceived hygiene risk as they had to be transformed from positive to negative. Finally, the level of measurement was defined for all variables. Although it is according to Sekaran and Bougie (2016) debatable if a Likert scale is of ordinal or interval scale, Burns and Burns (2008) claim that most research variables tested predominantly have an ordinal level of measurement. This is because it allows researchers to identify, classify and indicate a relative position of an object. That being the case, we applied the approach stated by Burns and Burns (2008) and perceived the Likert scale as ordinal, enabling us to place observations in a meaningful rank order.

## 5.2 Descriptive Statistics

The following subsections provide insights regarding the central tendency and dispersion of the observed constructs as well as an overview of the socio-demographics of the final sample and their distribution across the nine constructs.

### 5.2.1 Central Tendency and Dispersion

By aggregating the survey items, the arithmetic means for the variables of interest were computed. Since we used a seven-point Likert scale, a score of one, expresses the lowest level of consumers identifying with a certain benefit or risk associated with the adoption of P2P-FRSs, ranging up to a value of seven. The following *Table 2* depicts the measures of central tendency and dispersion for each variable utilized in our study. Interestingly, it can be observed

that all variables score a mean value between four and five, indicating that, on average, respondents answered the items quite homogeneously. Besides, and since the mean values were all above the “neutral point” of four, a positive attitude of the respondents towards all variables can be inferred. Furthermore, the average dispersion around the mean of all constructs, as measured by standard deviation (Easterby-Smith et al., 2018), ranged between 0.98366 to 1.60844.

Table 2: Measures of central tendency and dispersion (own table)

	ES	HM	PV	PE	EE	SI	HR*	LO	BI
Mean	4.9765	4.6409	4.6750	4.1609	4.7562	4.0559	4.3246	4.8847	4.3877
Standard Deviation	1.17340	1.21722	1.09488	1.43590	.98366	1.35794	1.34904	1.12066	1.60844

ES=Environmental Sustainability, HM=Hedonic Motivation, PV=Price Value, PE=Performance Expectancy, EE=Effort Expectancy, SI=Social Influence, HR= Hygiene Risk, LO=Loss of Ownership Risk, BI=Behavioural Intention, \*Transformed variable

### 5.2.2 Socio-Demographics

The distribution of our sample with 362 respondents was identical for each of our constructs. This was ensured by setting all statements in our questionnaire as forcing questions. Additionally, and in order to get a better insight into the socio-demographics of our participants, a few more general questions were included in our survey which served as descriptive variables for our research. In this way, the distribution of our sample could also be analysed in terms of the demographics gender, age, region, educational level and current occupation. A table presenting those detailed findings can be found in *Appendix B.1*, however a high-level description of the demographics follows.

Regarding gender, the socio-demographic statistics showed that out of the total 362 respondents, 64.9 percent were female and 33.7 percent were male. The remaining 1.4 percent of the participants were non-binary or preferred not to share their gender. Our demographics further revealed that most respondents were between 18 and 34 years old, as this age group accounts for 88.1 percent of our obtained sample. Thus, individuals older than 35 built the minority in our study, constituting less than 12 percent of the participants. This relatively young age group can be explained by our selected data collection instrument of a web-based self-completion survey, as younger individuals are generally more likely to participate in online questionnaires due to their familiarity with the internet (Lenhart et al., 2010).

In terms of regions, Europeans formed the largest group of our sample with 55.8 percent, followed by North Americans with 30.7 percent and Asians with 10.8 percent. The last 2.8 percent consisted of participants from Australia, South America and Africa. Besides, the results obtained through the education-related question, showed that our sample mainly represents undergraduates with 58.1 percent. Post-graduates formed the second-largest group with 36.7

percent, followed by high school alumni with 4.7 percent. Additionally, our sample consisted of full-time employees (48.3 percent) students (27.6 percent), part-time employees (10.8 percent), and self-employed individuals (7.5 percent). Respondents who were currently searching for jobs and those who were currently not employed or chose “Other” as an answer for our occupation question, accounted for 5.9 percent of the total respondents.

The above listed social demographics provided us with relevant insights, due to the novelty of P2P-FRS platforms. However, given that our pre-defined research scope was not targeted towards one criterion or group, we proceed with the data analysis on a holistic level excluding discussions of differences among demographics.

## 5.3 Hypotheses testing

The first section of this sub-chapter tests for the assumptions of multiple linear regression to ensure that requirements are met, and the chosen analysis method can be conducted. It is then followed by a section testing the hypotheses pertaining to the relationships between the perceived benefits and risks and the adoption intention of P2P-FRS platforms.

### 5.3.1 Assumption check – Multiple Linear Regression Analysis

As per Burns and Burns (2008), six assumptions need to be met prior to running a multiple linear regression analysis. The first requirement necessitating the presence of 15 cases per predictor is satisfied with a sample size of 362 thereby yielding 45.25 (362/8) cases per variable.

The second assumption pertains to the linearity of the relationship between the variables (Burns & Burns, 2008). The ANOVA test in *Appendix B.3* shows an F statistic whose value is 89.414 with an associated probability (p) of  $0.00 < 0.05$ . This indicates a significant regression model allowing us to reject the null hypothesis (H<sub>0</sub>) that there exists no linear relationship between the IVs and the DV. We therefore assert the assumption of linearity.

A third assumption is the normality of the error distribution of the DV (Burns & Burns, 2008). An ocular inspection of the histogram in *Appendix B.3* allows us to assume normality of distribution given the bell-shaped curve the DV follows. Furthermore, the normal p-plot of the standardized error residual of the adoption intention does not indicate a grave deviation from the diagonal line further allowing the assumption of normality of the error distribution.

A fourth assumption for multiple linear regression analysis relates to the constancy of error term variance, referred to as homoscedasticity (Burns & Burns, 2008). The scatterplot in *Appendix B.3* indicates a random distribution confirming the presence of homoscedasticity. Burns and Burns (2008) also discuss outliers as having a potential influence on the regression results necessitating their removal to enhance the power accuracy of the prediction. By calculating the Cook values using SPSS, the maximum value reached was  $0.08 < 1$  thereby indicating an acceptable level (Tabachnick & Fidell, 2019).

Finally, the last requirement for a multiple linear regression analysis is the avoidance of very high correlations between IVs; this is referred to as multicollinearity (Burns and Burns, 2008). Burns and Burns (2008) particularly maintain that should two variables have a correlation higher than 0.9, then only one of the two is needed. As per the correlation analysis conducted in *Appendix B.2*, it is observed that all correlations between the IVs exhibit values less than 0.9, indicating an acceptable level of correlation.

Moreover, as per *Table 3*, the Variance Inflation Factors (VIF) are all less than 10 and Tolerance is greater than 0.1, indicating normal levels of correlation (Burns and Burns, 2008).

*Table 3: Collinearity Statistics (own table)*

	Tolerance	VIF
Environmental Sustainability	.647	1.547
Hedonic Motivation	.530	1.888
Price Value	.511	1.956
Performance Expectancy	.351	2.849
Effort Expectancy	.565	1.770
Social Influence	.443	2.249
Hygiene Risk*	.779	1.284
Loss of Ownership Risk	.932	1.073

\*Transformed variable

*Table 4* also points out to the Condition Index whose value is less than 30 for all dimensions confirming that multicollinearity is not a problem for this set of IVs (Burns and Burns, 2008).

*Table 4: Collinearity Diagnostics (own table)*

Dimension	Condition Index	Variance Proportions							
		ES	HM	PV	PE	EE	SI	HR*	LO
1	1.000	.00	.00	.00	.00	.00	.00	.00	.00
2	6.380	.00	.01	.00	.02	.00	.02	.26	.02
3	12.382	.02	.03	.00	.11	.02	.17	.37	.18
4	14.343	.13	.08	.01	.00	.00	.21	.06	.53
5	16.140	.33	.42	.14	.07	.01	.03	.04	.00
6	17.391	.04	.14	.09	.50	.02	.53	.00	.02
7	18.505	.39	.02	.18	.18	.23	.03	.00	.14
8	20.566	.08	.20	.51	.02	.47	.01	.00	.03

9            27.793            .01            .10            .07            .11            .24            .00            .26            .08

ES=Environmental Sustainability, HM=Hedonic Motivation, PV=Price Value, PE=Performance Expectancy, EE=Effort Expectancy, SI=Social Influence, HR= Hygiene Risk, LO=Loss of Ownership Risk, BI=Behavioural Intention, \*Transformed variable

That being said, and as all six assumptions have been met, this research was conducted using a parametric multiple linear regression analysis via SPSS. The outputs of the analysis can be found in *Appendix B.3* considering a confidence interval of 95 percent and a 0.05 significance level.

### 5.3.2 Results – Multiple Linear Regression Analysis

As this study aims to assess the relationship between perceived benefits and risks and the intention to adopt P2P-FRS platforms in the fast fashion segment, a multiple regression analysis was conducted. After running a multiple linear regression analysis in SPSS, several outputs were generated. To begin with, the Model Summary in *Appendix B.3* points out to an R value of 0.818 representing the combined IV correlation. While the latter is relatively indicative in a simple linear regression, it is in fact the coefficient of determination  $R^2$  which is of significance in cases including several IVs (Burns & Burns, 2008). The model indicates a considerable adjusted  $R^2$  value of 0.662 underlining that 66.2 percent of the variation in the DV can be explained by the variance in the IVs, leaving only 33.8 percent unexplained by the model. The ANOVA table further indicates that the multiple linear regression model is robust and significant with an F statistic value of 89.414 and an associated probability  $p < 0.001$ .

The accuracy of the regression prediction is primarily dependent on the strengths of the correlations between the predictors (IVs) and the DV (Burns & Burns, 2008). The key components of the Coefficients Table were summarised in *Table 5* below to allow for a clear discussion of the multiple regression results. While the model exhibited a significant multiple correlation ( $p = 0.000$ ), this does not necessarily indicate that each predictor (IV) would be significant. In fact, a highly predictive regression model could be driven by certain predictors exhibiting stronger correlations (Burns & Burns, 2008). In the case of this model, we observed that all six out of the eight IVs were predictors of behavioural intention.

*H1* maintained that environmental sustainability has a positive relationship with behavioural intention. The results of this study support this hypothesis. Environmental sustainability ( $\beta = 0.089$ ,  $t = 2.348$ ,  $p = 0.019$ ) has an associated probability < significance level of 0.05 and a positive standardized beta coefficient of 0.089 indicating that environmental sustainability is a predictor of P2P-FRS adoption intention.

In *H2*, hedonic motivation was postulated to have a positive relationship with behavioural intention. This hypothesis is also supported per the results of this study indicating that hedonic motivation serves as a predictor of adoption intention. Hedonic motivation ( $\beta = 0.093$ ,  $t = 2.209$ ,  $p = 0.028$ ) has an associated probability < 0.05 and a standardized beta coefficient of 0.093 indicating that hedonic motivation is a predictor of P2P-FRS adoption intention.

The third hypothesis (*H3*) concerning price value was not supported by the results. Price value ( $\beta = 0.011$ ,  $t = 0.267$ ,  $p = 0.789$ ) and behavioural do not have a significant relationship as indicated by the associated probability value of  $0.789 > 0.05$ . That being the case, this study did not find price value to be a significant predictor of P2P-FRS adoption intention.

*H4*, on the other hand, was supported indicating the presence of a positive relationship between performance expectancy and behavioural intention. The results of the multiple regression analysis showed that performance expectancy ( $\beta = 0.407$ ,  $t = 7.878$ ,  $p = 0.000$ ) was a predictor of adoption intention in P2P-FRSs. Its associated probability was considerably lower than 0.05 and its standardised beta coefficient indicated a positive correlation of 0.407.

*H5*, pertaining to effort expectancy, was not supported by the results of the multiple linear regression analysis. Effort expectancy ( $\beta = 0.022$ ,  $t = 0.529$ ,  $p = 0.597$ ) had an associated probability level higher than 0.05 indicating the absence of positive relationship between effort expectancy and behavioural intention.

The sixth hypothesis (*H6*) postulated that social influence has a positive relationship with behavioural intention. The results indicated that social influence ( $\beta = 0.260$ ,  $t = 5.664$ ,  $p = 0.000$ ) had an associated probability level significantly lower than 0.05 and a positive standardized beta coefficient of 0.260. *H6* was therefore supported by the findings of this study indicating that social influence is a predictor of P2P-FRS adoption intention.

*H7* maintained that hygiene risk has a negative relationship with behavioural intention. This hypothesis was supported per the results of the multiple regression analysis. In fact, hygiene risk ( $\beta = -0.144$ ,  $t = -4.153$ ,  $p = 0.000$ ) had an associated probability lower than 0.05. Furthermore, and following its transformation in SPSS, it exhibited a negative standardized beta coefficient of -0.144 indicating a negative correlation with adoption intention.

The eighth and final hypothesis (*H8*) pertaining to loss of ownership was also supported. The results of the multiple regression analysis revealed that loss of ownership ( $\beta = -0.081$ ,  $t = -2.566$ ,  $p = 0.011$ ) has an associated probability lower than the 0.05 and a negative standardized beta coefficient. Loss of ownership, as such has a negative relationship with the intention to adopt P2P-FRS platforms in the fast fashion segment.

To conclude, the multiple linear regression analysis found environmental sustainability (*H1*), hedonic motivation (*H2*), performance expectancy (*H4*), social influence (*H6*), hygiene risk (*H7*), and loss of ownership (*H8*) to be predictors of adoption intention in P2P-FRS platforms for the fast fashion segment. Their respective hypotheses were subsequently supported. On the other hand, price value (*H3*) and effort expectancy (*H5*) do not act as predictors, and their hypotheses were not supported.

Table 5: Multiple Linear Regression Results (own table)

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	3.050	1.236		2.467	.014

Environmental Sustainability	.367	.156	.089	2.348	.019
Hedonic Motivation	.368	.167	.093	2.209	.028
Price Value	.050	.189	.011	.267	.789
Performance Expectancy	1.367	.174	.407	7.878	.000
Effort Expectancy	.106	.200	.022	.529	.597
Social Influence	.925	.163	.260	5.664	.000
Hygiene Risk*	-.515	.124	-.144	-4.153	.000
Loss of Ownership Risk	-.088	.034	-.081	-2.566	.011

\*Transformed variable

## 5.4 Summary of Results

A visual summary of the statistical results from the hypotheses testing is depicted in *Figure 6*. In doing so, the arrows between the perceived benefits and risks and the intention to adopt P2P-FRSs are in bold, indicating that *H1*, *H2*, *H4*, *H6*, *H7* and *H8* are found to be supported. Hypotheses *H3* and *H5*, on the other hand, turn out not to be supported.

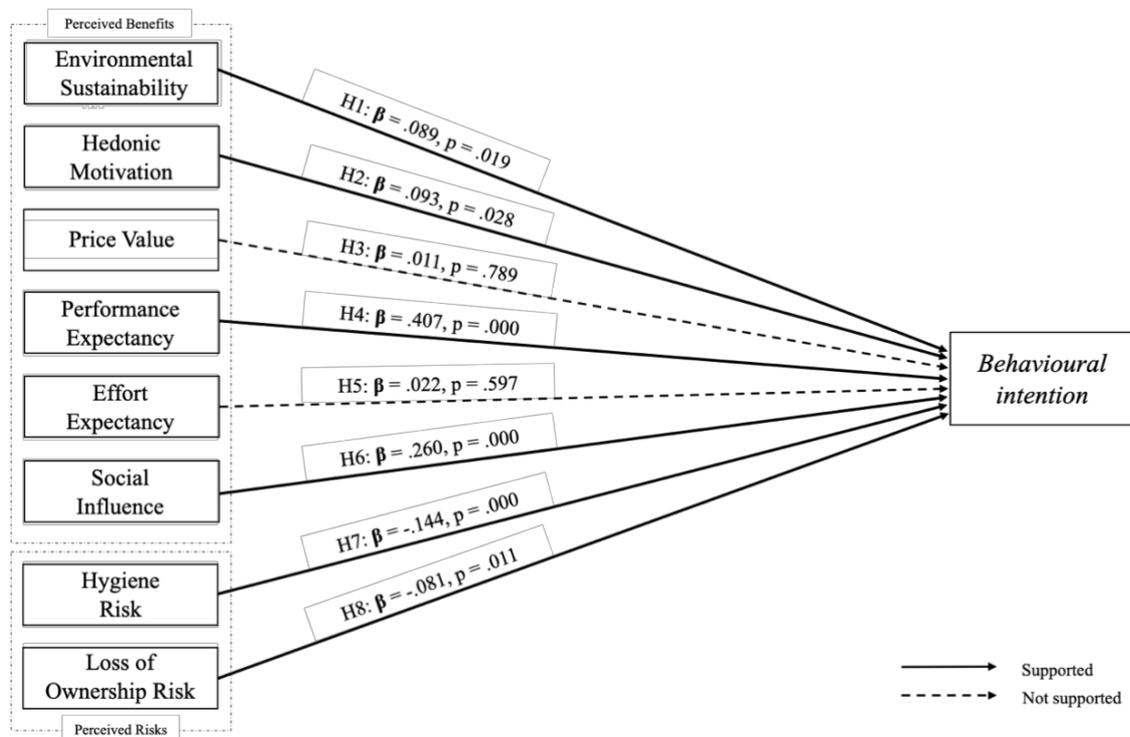


Figure 6: Conceptual Framework with Results  
(own figure)

Table 6 summarises the results of Figure 6 descriptively by listing both the hypotheses as well as the results of our decision.

Table 6: Results Summary of the Hypotheses (own table)

Hypothesis	Result
<b>H1:</b> <i>Environmental sustainability has a positive relationship with a consumer's intention to adopt fast fashion rental services in digital peer-to-peer platforms.</i>	Supported
<b>H2:</b> <i>Hedonic motivation has a positive relationship with a consumer's intention to adopt fast fashion rental services in digital peer-to-peer platforms.</i>	Supported
<b>H3:</b> <i>Price Value has a positive relationship with a consumer's intention to adopt fast fashion rental services in digital peer-to-peer platforms.</i>	Non-supported
<b>H4:</b> <i>Performance expectancy has a positive relationship with a consumer's intention to adopt fast fashion rental services in digital peer-to-peer platforms.</i>	Supported
<b>H5:</b> <i>Effort expectancy has a positive relationship with a consumer's intention to adopt fast fashion rental services in digital peer-to-peer platforms.</i>	Non-supported
<b>H6:</b> <i>Social influence has a positive relationship with a consumer's intention to adopt fast fashion rental services in digital peer-to-peer platforms.</i>	Supported
<b>H7:</b> <i>Hygiene risk has a negative relationship with a consumer's intention to adopt fast fashion rental services in digital peer-to-peer platforms.</i>	Supported
<b>H8:</b> <i>Loss of ownership risk has a negative relationship with a consumer's intention to adopt fast fashion rental services in digital peer-to-peer platforms.</i>	Supported

While the above served as a description of the results of the multiple linear regression analysis, the following discussion chapter will analyse every construct in relation to the literature review and the theoretical foundation.

## 6 Discussion

*The following section discusses the results of the analysis. It elaborates on the findings of each construct, connects them to the literature and further extends them by revealing and analysing the insights generated.*

### 6.1 Environmental Sustainability

As hypothesized, the results of the analysis point out that environmental sustainability has a positive relationship with behavioural intention to adopt P2P-FRS platforms in the fast fashion segment. This means that the more environmentally sustainable P2P-FRS platforms are perceived, the more prone consumers are to adopt them in the fast fashion segment. This confirms previous findings addressing the role of environmental sustainability benefits on CFC adoption and asserts its predictive nature (Armstrong et al., 2015; Armstrong et al., 2016; Baek & Oh, 2021; Lee et al., 2021; Lee & Huang, 2020b). The results further contradict Borg et al.'s (2020) findings which recommended companies striving to promote use-oriented product service systems not to focus on environmental values given their little significance for consumers.

The results could be interpreted as highlighting the role P2P-FRSs have on the perception of fast fashion companies. While McNeill and Moore (2015) argue that consumers are less prone to view fast fashion efforts as sustainable, our research, by finding a relationship between environmental sustainability and adoption intention in the fast fashion segment suggests otherwise. In implementing P2P-FRSs, the fast fashion segment attempts to encourage a different form of consumption instead of merely increasing environmentally-friendly production. As a result, this segment, whose relationship to the environment has been detrimental (Ro, 2020), can demonstrate its authentic motives to be both sustainable and socially responsible especially for environmentally-active consumers. In fact, as environmental causes are a strong driver for consumers to join CC practices (Dururu et al., 2015), and since consumers are sceptic of fast fashion motives (Kang & Hustvedt, 2014; Ritch, 2015), implementing P2P-FRSs can serve to benefit not only the environment but also consumer perception of fast fashion companies.

Furthermore, sustainable fashion forms have been associated with freedom from the fashion system and the control of big corporations (Becker-Leifhold & Iran, 2018). This could be especially effective in the fast fashion segment that is dominated by international retailers such as Zara and H&M. Therefore, despite the tainted ecological reputation of the fast fashion segment, this study finds that the perceived environmental benefits of FRSs have a positive relationship with encouraging its adoption intention in P2P platforms.

## 6.2 Hedonic Motivation

The results of this research indicate that hedonic motivation has a positive relationship with the intention to adopt P2P-FRS platforms in the fast fashion segment, thereby accepting hypothesis 2. Research addressing CFC has indicated that the joy of adventures and finding rare items significantly motivate a consumer's intention towards adopting such practices (Armstrong et al., 2015; Armstrong et al., 2016; Becker-Leifhold & Iran, 2018; Jenß, 2004; Niinimäki, 2010; Roux & Guiot, 2011). Moreover, by getting the chance to experiment with new styles that they otherwise might not have had access to, consumers fulfil the need for novelty and innovation (Borg et al., 2020). In fact, and when engaging in CFC, consumers often gain access to rare items that are not necessarily in the mainstream marketplace (Jenß, 2004; Roux & Guiot, 2011). That is why CFC has been compared to a treasure hunt in a way or another especially when it comes to accessing vintage clothes that are otherwise difficult to find (Isla, 2013; Lang et al., 2019). What is more, while Park and Joyner Armstrong (2019a) maintain that hedonic motivation is closely tied to accessing luxury items, the results indicate that this benefit is also significant in the fast fashion segment. This could be driven by the novelty of the P2P-FRS concept especially when implemented in a segment that is otherwise viewed as accessible. In that sense, the implementation of P2P-FRSs in the fast fashion segment could add to the uniqueness one feels, thereby encouraging its adoption.

Furthermore, similar to shopping, FRSs create a short-term emotional satisfaction with less material consumption (Armstrong et al., 2015). In fact, by fulfilling consumers' needs for change with limited environmental guilt, FRSs can be said to provide a deeper product satisfaction. This is especially relevant in the fast fashion segment, given its negative environmental reputation. Furthermore, FRSs can serve as a way for consumers to get inspired by others' fashion styles and leave their comfort zones; particularly in P2P-FRS platforms where they get exposed to other peers (Armstrong et al., 2016). Moreover, P2P-FRS platforms create a fun experience by allowing consumers to take up new roles. While traditional consumption has rigid roles for the supply and demand sides, P2P-FRSs transform the interaction by allowing the consumer to act as an asset provider (Armstrong et al., 2015). The results of the study, as such, point out to the added value of the P2P aspect in increasing the perceived enjoyment of FRSs and subsequently encouraging adoption intention in the fast fashion segment.

## 6.3 Price Value

This study does not find price value to have a positive relationship with P2P-FRS adoption in the fast fashion segment. This contrasts with CFC literature that asserts the role cost savings and price value play in motivating the utilisation of such forms of consumption (Armstrong et al., 2015; Baek & Oh, 2021; Bardhi & Arnould, 2005; Becker-Leifhold & Iran, 2018; Borg et al., 2020; Lee et al., 2021; Lee & Huang, 2020a; Lee & Chow, 2020; Roux & Guiot, 2011). The results can be interpreted in the following ways. The first pertains to the nature of fast fashion items and their relatively affordable price. As discussed, fast fashion revolves around

the concept of accessibility and affordability rendering the option of owning it potentially more feasible and rational for consumers. In fact, as highlighted by Borg et al. (2020), consumers are more prone to find renting tempting when it frees up resources for more higher-end products. This possibly indicates that consumers are more willing to rent luxury items given the more noticeable cost savings as opposed to fast fashion. Furthermore, as P2P-FRS platforms offer the option of renting out one's clothes and given the relatively low margin consumers stand to gain from fast fashion clothes, providing assets for renting might be viewed as more financially straining than profitable. In fact, given the relatively lower quality of fast fashion clothes, asset providers might not stand to generate a sustainable profit from renting their clothes if the item's timespan is short-lived (Bianchi & Birtwistle, 2012; Joung, 2014).

Second of all, the P2P platform price setup itself could play a role in price value's lack of significance. In their discussion of financial benefits in use-oriented product service systems, Borg et al. (2020) find that the long-term spreading of costs attained from CFC forms is most attractive for consumers, which comes in the form of subscriptions (Arrigo, 2021; Pedersen & Andersen, 2015; Perlacia et al. 2016). With that in mind, and as P2P consumers generally pay per rented item for the designed period (Jaye, 2020), renting fast fashion clothes might not be viewed as adding a price value to the transaction. Moreover, from an asset provider's point of view, the P2P platform revenue scheme is highly relevant and is therefore discussed by Choi and He (2019). Platforms that offer a revenue sharing option rather than a fixed one present themselves as more profitable for those renting out clothes. As such, the potential novelty of P2P platforms and the lack of knowledge with regards to the means of generating profit could render P2P-FRS platforms less financially attractive for consumers. Based on the aforementioned, this study does not find price value and financial benefits to be a predictor of P2P-FRS adoption intention in the fast segment and attributes this to the affordable nature of fast fashion and the price scheme setup of P2P platforms.

## 6.4 Performance Expectancy

The fourth hypothesis, addressing the relationship between performance expectancy and the intention to adopt P2P-FRS platforms in the fast fashion segment is accepted. In other words, this means that consumers are more prone to adopt P2P-FRS platforms when they believe they will get more value from them. It is worth mentioning that performance expectancy is not directly addressed in literature but rather discussed under the umbrella term of perceived functional benefits. Nonetheless, and as this study is rooted in the UTAUT2 model which specifically differentiates between usefulness and ease of use, we refer to the benefits pertaining to usefulness when addressing this construct.

Literature indicates that increased access and flexibility are major components of the value offered in CFC forms (Borg et al., 2020; Armstrong et al., 2015). In fact, renting provides consumers with the ability to change products more frequently than if they own them, which is quite advantageous for consumers who seek experience and not ownership (Borg et al., 2020). In that sense, renting provides consumers with the chance to test items with no burden of ownership. Consumers can enjoy items without having to worry about closet space or where

to fit them and can return them once they want something new (Park & Joyner Armstrong, 2019a). Time savings are also mentioned as a functional value gained since consumers save the hassle of sorting through items physically and can instead do that via platforms.

Most importantly, since quality is a key factor in evaluating performance in the clothing sector, and since this study finds performance expectancy to predict adoption intention, we can assume that consumers perceive the quality of clothing from a P2P-FRS platform as satisfactory. This is particularly relevant in the context of P2P platforms where asset providers serve as the suppliers and are subsequently in control of the quality standards. This insight could indicate that the quality of items is not a concern for consumers when adopting P2P-FRS platforms in the fast fashion segment potentially driven by trust in the peers or the platform itself.

What is more, in the context of P2P operations, Hawlitschek et al. (2018) addressed the relevance of the variety, diversity and ubiquitous availability offered, especially for curious users. With today's experience-oriented consumers, such features can significantly add to the functional value of P2P-FRS platforms thereby increasing consumer willingness to both accept and adopt them. That being said, this study finds performance expectancy and benefits pertaining to usefulness to predict adoption intention in P2P-FRS platforms. These results indicate the increased prominence of access for today's consumers and the role P2P-FRS platforms play in solidifying and spreading this trend.

## 6.5 Effort Expectancy

The results of this study indicate that effort expectancy has no positive relationship with a consumer's intention to adopt P2P-FRS platforms in the fast fashion segment, thereby rejecting hypothesis five. Synonymous to ease of use, effort expectancy has been mentioned in CFC literature as a form of functional benefit (Catulli, 2012; Kaushik et al., 2020; Park & Joyner Armstrong, 2019a; Tukker & Tischner, 2006). Park and Joyner Armstrong (2019a) particularly point out to easy navigation and interaction as drivers of ease and convenience when utilising online collaborative retail models. This study, however, contradicts literature findings as no significant relationship is identified between this construct and behavioural intention. This possibly indicates that ease of use and convenience, in the context of P2P-FRSs, are expected and intertwined in the value offering. In other words, given the plethora of options that consumers are exposed to today, creating a service that is easy to use is a prerequisite. In that sense, it does not constitute a concern for consumers since it is part of the package offered.

Furthermore, Gansser and Reich (2021) point out to the significance of ease of use in models with which consumers are getting acquainted. That being the case, and as online renting shares commonalities with online shopping on an operational level (Lee & Chow, 2020), P2P-FRSs does not present themselves as complicated in terms of technical utilisation. In fact, given the prevalence and widespread success of P2P platforms, such as Airbnb and Uber, they are potentially perceived as easy to use and make up a part of the everyday life which renders effort expectancy less significant in the adoption decision. This is further corroborated when looking at the demographics of the sample respondents whose average ages range between 18 and 34. This age group is regarded as relatively tech-savvy and is most likely accustomed to online

shopping or sharing platforms in one way or another (Lenhart et al., 2010). Another point worth mentioning with regards to the demographic impact pertains to the regions from which the consumers originate. The majority of the respondents in this study are from Europe and North America. With fashion renting platforms such as “Rent The Runway”, “Bag Borrow or Steal”, “Thredup” and “Girl Meets Dress” originating from these two regions, respective respondents have a higher chance of perceiving P2P-FRSs as simple and easy to use. This study, therefore, indicates that effort expectancy does not have a positive relationship on the intention to adopt P2P-FRS platforms. This could be driven by respondents’ knowledge of and experience with similar concepts such as online shopping as well as the ages and regions of the sample collected.

## 6.6 Social Influence

This study finds social influence to have a positive relationship with the behavioural intention to adopt P2P-FRS platforms thereby accepting hypothesis six. The results confirm the findings of Becker-Leifhold (2018), Borg et al. (2020), Piarna et al. (2020) and Baek and Oh (2021). These authors contend that pressure exerted by external parties, particularly those close to us, tends to increase our willingness to adopt behaviours similar to theirs. In a sense then, driven by social norms regarding environmental sustainability, one might be more prone to adopt such practices. Baek and Oh (2021) particularly discussed the pursuit of social acceptance and how that might drive individuals to engage in CFC forms.

That being said, this study postulates that in the case of P2P-FRS platforms, the positive relationship between social influence and intention to adopt is more likely to stem from a need to belong to a group and solidify one’s position within it. In fact, since P2P platforms involve interactions between consumers, the significance of the social aspect is heightened. In that sense, one might be more prone to join a P2P-FRS platform if their people in their surroundings use these services as it might serve to strengthen the relationships between them. These results further contradict Lee and Chow's (2020) findings which maintained that the social risk associated with not owning would deter individuals from engaging in rental services. This could be seen as highlighting the increasing role of access instead of ownership in today’s world. Having the majority of our respondents from Europe and North American, however, could potentially explain the results given as CFC forms are more prevalent in these regions of the world.

Finally, the results could be interpreted as asserting the positive role of subjective norms in the fast fashion segment. In fact, the results indicate that despite fast fashion’s reputation, environmentally-friendly social influence motivates individuals to consume it especially when implemented through FRSs. In that sense, while avoiding fast fashion might be a growing trend, the results indicate that in the case of P2P-FRS platforms, social influence can in fact positively influence its adoption.

## 6.7 Hygiene Risk

The seventh hypothesis addressing the negative relationship between perceived hygiene risk and a consumers' intention to adopt fast FRS via digital P2P platforms is accepted. In other words, consumers are more likely to be discouraged from adopting P2P-FRS platforms when they perceive the service as less hygienic. These results are consistent with the barrier of hygiene risk as claimed in CFC literature (Armstrong et al., 2015; Armstrong et al., 2016; Borg et al., 2020; Catulli, 2012; Fisher et al., 2008; Na'amneh & Al-Husban, 2012; Perry & Chung, 2016; Rexfelt & Hiort af Ornäs, 2009). In fact, Armstrong et al. (2016) argue that consumers' doubts regarding a proper hygiene level of used products is problematic, especially for goods that are close to the skin, which is particularly true for garments. Additionally, and as claimed by Argo et al. (2006), negative product evaluations are exacerbated by an increasing number of people who have come into contact with the product, which is therefore particularly counterproductive for CFC and its various forms. As this especially conflicts with the rationale of fashion rental, it is plausible that hygiene concerns are a main barrier for consumers to adopt the service.

For this reason, consumers' hygiene concerns form a major challenge for FRSs, especially for those that are provided via P2P platforms. This is because the asset provider, rather than the company itself, is responsible for cleaning the garments (Roberts-Islam, 2019). Asset providers may therefore have health concerns as they have to deal directly with uncleaned and potentially contaminated clothing, reducing their overall willingness to adopt P2P-FRSs. In addition, this consumer-to-consumer type of fashion rental requires a great deal of trust from peers acting as renters, as they do not know the owners of the garments and their reliability in terms of cleaning. What is more, in P2P-FRSs, no brand vouches with its reputation for an adequate level of hygiene, which further enforces the risk of contamination for tenants. However, and as Chan (2020) notes, platform providers have already responded to these concerns. That being said, platform providers started to introduce clear guidelines and strict regulations for the cleaning of fashion pieces for both users and asset providers. Managing the issue of hygiene is difficult, as the outbreak of the COVID-19 pandemic has further heightened consumers' concerns due to the threat of viral contamination (Kirk & Rifkin, 2020), further explaining why this study finds hygiene risk to negatively influence the intention to adopt PRP-FRS platforms in the fast fashion segment.

## 6.8 Loss of Ownership Risk

The findings of our study confirm that loss of ownership has a negative relationship with a consumers' intention to adopt P2P-FRS platforms in the fast fashion segment. In other words, the more important the possession of clothing is for individuals and the more they identify with garments, the less inclined they are to adopt P2P-FRSs. With fashion rental being an access-based form of consumption, as referred to by Pedersen and Netter (2015), it cannot fulfil an individual's desire for possession. Rather, FRSs presuppose a commonality of ownership that only encompasses a short-term possession of garments (Catulli, 2012). Therefore, and as

Gentina (2014) asserts, fashion rentals continue to face considerable scepticism amongst consumers, as clothing still serves as an expression of one's identity. What is more, consumers still associate control with owning clothes, as it provides them with a certain power of self-presentation, thus manipulating the impressions others make of them. Consequently, numerous scholars agree that loss of ownership (Armstrong et al., 2015; Armstrong et al., 2016; Borg et al., 2020; Catulli, 2012; Tukker & Tischner, 2006), with its temporary or permanent relinquishment of control over artefacts, is one of the most substantial barriers for consumers to adopt FRSs.

The results indicate as such, that although the phenomenon of liquid consumption is challenging the traditional notion of possession, loss of ownership still acts as a perceived risk when it comes to renting clothes. However, while losing ownership presents itself as a more explicit risk for the users of P2P platforms who rent clothes, it might have less of an impact on the asset providers renting out their fashion pieces. As this study is quantitative in its approach and confirmatory in its purpose, additional individual insights could not be obtained. However, given that asset providers in P2P-FRS platforms do not relinquish ownership of their items and can choose at any point to stop renting them out, one could postulate that differences might exist between the two types of consumers that would be worth investigating. Moreover, since loss of ownership is found to be significant in our results, we could assume that the respondents in our survey are more likely to adopt P2P-FRS platforms as users instead of asset providers.

That being said, this research finds that loss of ownership and its associated perceived risk discourage the adoption intention of P2P-FRS platforms in the fast fashion segment. These results indicate that the trend towards access-orientation, despite its academic success, still faces the challenge of overcoming ownership and its role in consumption in the fast fashion segment. It further indicates that consumers favour utilising P2P-FRS platforms to rent others' clothes rather than rent out their own.

# 7 Conclusion

*The following sections begin by addressing the research aim and findings. This is followed by a discussion of the theoretical and managerial implications. Finally, we address the study's limitations and identify directions for future research.*

## 7.1 Research Aim

Driven by access-oriented and environmentally conscious consumers, the controversial nature of the fast fashion segment and the success of P2P platforms, this research set out to assess the significance of consumer perceived benefits and risks in predicting adoption intention of P2P-FRS platforms in the fast fashion segment. Rooted in the UTAUT2 theory and based on a literature review of the fashion industry, CFC, FRSs and P2P platforms, a conceptual framework was created to visualise the postulated relationships between eight predictors and behavioural intention. Data was collected through a web-based self-completion survey and consisted of a final sample of 362 respondents. Moreover, a multiple linear regression analysis was conducted to test the set hypotheses.

The results indicate that environmental sustainability, hedonic motivation, performance expectancy and social influence have a positive relationship with adoption intention while each of hygiene and loss of ownership exhibit a negative one. On the other hand, this study finds that both price value and effort expectancy do not have a significant relationship and subsequently do not predict adoption intention in P2P-FRS platforms in the fast fashion segment.

## 7.2 Implications

Based on our results, several relevant implications are captured on both theoretical and managerial levels. We discuss them in the following sections.

### *7.2.1 Theoretical Implications*

The present study contributes to the existing literature within consumer behaviour, technology acceptance, CFC and platform operations by assessing the relationship between consumer perceived benefits and risks and P2P-FRS platform adoption intention in the fast fashion segment. In doing so, it offers several theoretical contributions.

To begin with, in its area of focus, this study broadens the research on sustainable consumption practices and CFC forms by specifically addressing FRSs. FRSs are of particular interest as they combine both access and environmental awareness, thereby reflecting the current state of consumer mindset (Bardhi & Eckhardt, 2017). That being said, while literature has extensively

addressed CFC in its various forms, FRSs have seldom been the sole topic of discussion, especially in the fast fashion segment (Adam et al., 2018; Choi & He, 2019; Clube & Tennant, 2020; Lang & Joyner Armstrong, 2018; Lang et al., 2019; Lee & Chow, 2020; Mukendi & Henninger, 2020). In fact, with its notorious environmental reputation, the fast fashion segment stands to significantly gain from embracing ecologically-friendly operations. Our research, therefore, extends the knowledge of FRSs by examining the relevance of cited perceived benefits and risks in this segment. This is particularly interesting given the scepticism with which consumers meet sustainability efforts in the fast fashion industry (Kang & Hustvedt, 2014; Ritch, 2015). Besides, previous research in CFC has focused on the B2C side with user-oriented product service systems. However, given the rise of P2P platforms, the increased access they provide, and their ability to create new consumer roles, a focus on them stands to provide valuable insights.

Second, literature in CFC has been primarily rooted in the Theory of Planned Behaviour and the Theory of Reasoned Action. However, given our focus on P2P platforms which serve as a form of technology, the adapted UTAUT2 model presents itself as a valid choice especially when considering the similarities between its constructs and the perceived consumer benefits and risks derived from CFC literature. This adapted model, as such, contributes to the field of technology acceptance of FRSs from a consumer perspective. Furthermore, research addressing FRSs has mostly been qualitative in nature in its pursuit of exploring insights (Armstrong et al., 2015; Armstrong et al., 2016; Borg et al., 2020). Employing quantitative analysis in this research allows us to add to the theoretical understanding in this field by testing the generalisability of CFC findings in the FRSs realm.

Our most significant contributions, however, lie in our study's findings. In fact, contrary to CFC literature, both price value and effort expectancy are not significant predictors of the intention to adopt P2P-FRS platforms in the fast fashion segment. This could indicate that the affordability of this segment and the prevalence of online shopping are potential factors that diminish the positive impact of these two constructs. On the other hand, environmental sustainability, hedonic motivation, performance expectancy and social influence are found to have a positive relationship with behavioural intention thereby confirming established literary findings. What is more, these findings extend previous literature by generating insights that emphasise the value of incorporating P2P-FRSs in fast fashion operations as a means of creating a positive perception and increasing purchase intention. This is particularly evident with the environmental sustainability construct where despite the segment's controversial reputation and the increasing tendency to boycott its brands, consumers were willing to engage with fast fashion when it implemented P2P-FRSs. Second, while fast fashion's accessibility renders it less exclusive and potentially less enjoyable; the incorporation of P2P-FRSs could serve as a stimulus generating feelings of novelty, joy and excitement in a segment otherwise viewed as homogeneous. In fact, adopting P2P-FRSs allows individuals to enjoy consuming in an environmentally guilty-free manner further solidifying the role of hedonic motivation. Third, our findings indicate that consumers perceive fast fashion as valuable when incorporating P2P-FRSs, as it provides them with functional benefits, pertaining to more closet space and access. Finally, and since P2P-FRSs include social interaction, the significance of social influence is heightened subsequently encouraging consumers to adopt them.

Moreover, both hygiene and loss of ownership risks are found to have a negative relationship with adoption intention. The results of hygiene could be interpreted as reflecting heightened contamination concerns, driven by the pandemic as well as trust issues pertaining to the P2P format. The loss of ownership, on the other hand, deviates from the consumer trend of access-orientation and indicates that ownership, in the fast fashion segment is still important to consumers.

### *7.2.2 Managerial Implications*

The insights generated from this research hold several practical implications for companies considering the implementation of FRSs in the fast fashion segment through P2P platforms.

First of all, the results indicate that consumers who view FRSs as more environmentally sustainable are more willing to use them. As implied in our discussion, this study maintains that by implementing such services, fast fashion companies can potentially combat the negative influence of their reputation and promote adoption of FRSs. In fact, as indicated by Kang and Hustvedt (2014) and Ritch (2015), consumers are often weary of green attempts made by fast fashion companies, especially those that focus on green labelling. That being the case, FRSs could hold a greater potential by showing the fast fashion segment's willingness to embrace and implement services that do not increase production but attempt to change consumption at its core. This is particularly important for the fast fashion segment whose ecological reputation has given rise to brand avoidance and boycotting trends (Kim et al., 2013; Yoon et al., 2020). In other words, fast fashion companies should not hesitate when it comes to implementing FRSs and should communicate their services with consumers with an explicit focus on the environmental potential they hold. What is more, by utilising P2P platforms for their FRSs, fashion companies can further emphasize their interest in promoting sustainable consumption and empower their consumers to do the same. In that sense, fast fashion brands could create their own P2P-FRS platforms where their environmentally-conscious consumers can rent out items to one another. The company can further profit from this by adding an additional revenue stream coming from the commissions made per rental transaction.

Second of all, with hedonic motivation exhibiting a positive relationship with behavioural intention, this study finds it important for P2P-FRS platforms in the fast fashion segment to underline the emotional benefits consumers attain from utilising them. As consumers today are more interested in remaining up-to-date with the latest trends, companies implementing FRSs should market the latter as novel, "hype" and providing a fun and diverse experience. To ensure that consumers are always exposed to new trends and inspired by fresh items, P2P-FRS platforms could consider adding hashtags describing the style of clothing for each user. It could then utilise these styles to recommend users to try out asset providers that they have not yet interacted with. This also serves to stress the functional value provided by the platforms as it not only increases access but also provides customisation in one form or another. In fact, given the positive relationship between performance expectancy and adoption intention, adding such services would likely increase their value in the eyes of consumers thereby motivating usage. Moreover, each consumer on the platform could have their own virtual closet where they could

view items that they have either rented out to someone or rented from someone. By doing so, they are provided with an overview of their transactions while mimicking the tangibility of a real-life closet thereby embodying both functional and emotional benefits. In fact, this particular feature also serves to create a sense of ownership for the consumers. As this study finds loss of ownership to discourage adoption intention, it is important for the platforms to create and nurture that feeling.

P2P platforms should also consider creating homepages with virtual bulletin boards where users can share photos of their outfits and tag their respective asset providers. In fact, given the positive relationship between social influence and adoption intention, highlighting the interaction aspect provided is crucial since it serves to set P2P-FRS platforms apart from others offering the same services. Furthermore, P2P-FRS platforms should consider collaborating with influencers on social media platforms to gain coverage and encourage their followers to consider these services.

The results of the analysis also indicate that hygiene risk has a negative relationship with the intention to adopt P2P-FRS platforms in the fast fashion segment emphasizing the importance of mitigating its effect. Hygiene risk, which was heightened during pandemic times, is especially pivotal to address and manage. Since clothing items in P2P platforms are owned and managed by individuals, an exceptional level of hygiene could be difficult to guarantee by the platforms. One suggestion, however, would be the addition of mandatory hygiene ratings and reviews from both sides. For example, when an asset provider sends out an item for renting, the user receiving it must rate its hygiene level prior to utilising it. These results would be reported to the platform provider to ensure quality measures are maintained. Furthermore, should the hygiene rating of a consumer, be it a user or asset provider, drop below a particular threshold, the platform retains the right to revoke their membership and prohibit them from utilising the FRS.

Finally, it is worth mentioning that both price value and effort expectancy were not found to predict adoption intention. We therefore recommend the fast fashion segment and companies considering P2P-FRSs to focus their operational efforts on increasing the environmental, emotional, functional and social benefits and on decreasing the risks associated with hygiene and loss of ownership. The above-mentioned recommendations provide a set of practical steps that should be undertaken to better respond to the consumer insights generated by this research.

### 7.3 Limitations of this Research

Even though this study extends literature by contradicting existing findings, we acknowledge that it entails several limitations. By being transparent and describing them openly, we intend to inspire and encourage other researchers to replicate or extend our study in the future.

Our choice of sampling method forms the first limitation of our study. Since convenience sampling was selected, not everyone in the population had an equal chance of being included in the sample. In fact, and due to the sampling method chosen, we based our findings on individuals who were keen to help and available, which can be seen as sampling bias (Easterby-

Smith, 2015). As a result, individuals who were less willing to participate but may hold different opinions or characteristics were excluded. Therefore, argued by Malhotra (2010), convenience sampling, as a form of non-probability sampling, does not provide a true representation of the population and consequently does not allow for generalisation of the results. However, following an internal realist ontological position, we cannot conclude with certainty that the results of this research are a true reflection of reality since the study serves as a representation and not the truth itself (Eaterby-Smith et al., 2018). Consequently, our research is valid when it comes to the settings within which it was conducted but does not allow for generalisation.

The second limitation of our research concerns the applied data collection instrument, its distribution and the sample group obtained. Since a web-based self-completion survey was chosen as the survey instrument, most of our respondents were young: under 34 years old to be precise. We would further like to acknowledge that the distribution of surveys through social media, as we did, is very susceptible to selection bias especially when specific groups are targeted for their convenience. In fact, the selection of social media groups based only on our intuition is skewed by cognitive biases (Tversky & Kahneman, 1974). Although the selection for these groups seemed reasonable to us, they may not have been appropriate.

Additionally, and presumably due to the focus on the fashion segment and the snowball sampling used, the participants in our survey were predominantly women and individuals with a higher educational background. Thus, we acknowledge that our sample is biased since it contained too many units with identical characteristics, indicating a coverage problem (Burns & Burns, 2008). Furthermore, the literature points out that females, owing to their altruistic characteristics, and young, well-educated individuals are more inclined to consume sustainably, further influencing our results (Gifford & Nilsson, 2014; Gilg, Barr & Ford, 2005). It is also worth mentioning that our sample primarily consisted of European and North American respondents potentially limiting the variety of the responses generated. In fact, the prevalence of FRSs in these regions might have led to their respondents expressing a higher willingness or bias towards their adoption.

Finally, the quantitative approach utilised to collect empirical data served as a limitation to our study. While this choice of methodology is generally conducive to improve the generalisability of the findings and to identify patterns behind respondents' perceptions, it does not allow us to understand the underlying reasons for our findings. Therefore, it would be valuable for future research to qualitatively analyse the relationship between consumer perceived benefits and risks and the intention to adopt P2P- FRS platforms in the fast fashion segment.

## 7.4 Directions for Future Research

This thesis points out to numerous questions and topics that would be valuable to further investigate. The results of this study indicate that all constructs, excluding price value and effort expectancy, act as predictors of adoption intention in P2P-FRS platforms in the fast fashion segment. Given the differences between luxury and fast fashion however, especially on a quality and price level, it would be valuable to conduct research that compares the relationships

of the above-mentioned perceived benefits and risks across both segments. Another potential topic to explore could be the differences between platform types. What is more, differences between a P2P and a B2C platform in FRSs would be particularly interesting to study as a way of determining the role company-mediation has on consumer perceptions and subsequent intention.

Future research could also serve to extend the UTAUT2 model by adding brand equity dimensions to the list of constructs. Brand equity dimensions and online purchase intention have been, to a large extent, addressed in the context of consumer reviews (Chakraborty, 2019; Lee, Lee & Lee, 2016; Lu, Chang & Chang, 2014). With that in mind, it would be valuable to apply these dimensions in the realm of FRSs. In fact, it would be specifically relevant to compare the strengths of perceived benefits and risks in predicting adoption intention across start-ups and well-established companies in the P2P-FRS realm with brand awareness and loyalty moderating these effects.

Moreover, the findings from certain hypotheses reveal insights about each construct that would require further research to examine and confirm. To begin with, environmental sustainability is found to have a positive relationship with adoption intention in the fast fashion segment. This could possibly indicate that the implementation of FRSs has the potential to alter consumer perception of the fast fashion segment thereby increasing the intention to adopt its services. In other words, future research should consider assessing the mediating influence of attitude on adoption intention. This could be done by conducting a comparative study assessing consumer attitudes and purchase intentions towards two fast fashion brands with only one of them offering FRSs.

This study's results also indicate the significance of hygiene as a consumer perceived risk discouraging consumers from adopting P2P-FRSs. As the current pandemic has heightened levels of contamination concern (Kirk & Rifkin, 2020), future research could conduct longitudinal studies to quantify the influence of COVID-19 on behavioural intention and assess whether hygiene risk would maintain this level of significance in a post-pandemic world. In fact, incorporating the construct of trust could also be valuable to investigate its moderating influence on hygiene risk on adoption intention.

Furthermore, as P2P platforms include both a user and an asset provider, understanding the differences between each perspective would be significant to investigate. This would be especially relevant when addressing the financial benefits and loss of ownership risks since their implications differ based on the consumer type in P2P operations. In fact, other comparisons that could also be held would include looking at different cultural and age groups to discover potential variances amongst them.

Finally, to have a better understanding of the statistical results of this confirmatory study, future research could consider conducting focus groups and interviews. These data collection methods could allow for the gathering of qualitative exploratory data which would, in turn, better explain the generated consumer insights.

# References

- Abbey, J. D., Meloy, M. G., Guide, V. D. R., & Atalay, S. (2015). Remanufactured Products in Closed-Loop Supply Chains for Consumer Goods, *Production and Operations Management*, vol. 24, no. 3, pp.488–503
- Ableitner, L., Tiefenbeck, V., Meeuw, A., Wörner, A., Fleisch, E., & Wortmann, F. (2020). User Behavior in a Real-World Peer-to-Peer Electricity Market, *Applied Energy*, vol. 270
- Adam, M., Strähle, J., & Freise, M. (2018). Dynamic Capabilities of Early-Stage Firms: Exploring the Business of Renting Fashion, 2, *Journal of Small Business Strategy*, vol. 28, no. 2, pp.49–67
- Akbar, P., Mai, R., & Hoffmann, S. (2016). When Do Materialistic Consumers Join Commercial Sharing Systems, *Journal of Business Research*, vol. 69, no. 10, pp.4215–4224
- Akdemir, N. (2018). Visible Expression of Social Identity: The Clothing and Fashion, *Gaziantep University Journal of Social Sciences*, vol. 17, no. 4, pp.1389–1397
- Akehurst, G., Afonso, C., & Gonçalves, H. M. (2012). Re-examining Green Purchase Behaviour and the Green Consumer Profile: New Evidences, *Management Decision*, [e-journal], Available online: <https://www.emerald.com/insight/content/doi/10.1108/00251741211227726/full/html> [Accessed 6 May 2021]
- Alalwan, A. A., Dwivedi, Y. K., & Williams, M. D. (2016). Customers' Intention and Adoption of Telebanking in Jordan, *Information Systems Management*, vol. 33, no. 2, pp.154–178
- Alalwan, A., Dwivedi, Y., & Williams, M. (2014). Examining Factors Affecting Customer Intention and Adoption of Internet Banking in Jordan, UK Academy For Information Systems Conference Proceedings 2014, Paper 3, Available online: <https://aisel.aisnet.org/ukais2014/3/> [Accessed 13 April 2021]
- Amaro, S., Andreu, L., & Huang, S. (2019). Millennials' Intentions to Book on Airbnb, *Current Issues in Tourism*, vol. 22, no. 18, pp.2284–2298
- Amaro, S., & Duarte, P. (2015). An Integrative Model of Consumers' Intentions to Purchase Travel Online, *Tourism Management*, vol. 46, pp.64–79
- Amed, I., Berg, A., Balchandani, A., Hedrich, S., Rölkens, F., Young, R., Ekeløf Jensen, J., & Peng, A. (2020). State of Fashion | McKinsey, Available online: <https://www.mckinsey.com/industries/retail/our-insights/state-of-fashion#> [Accessed 6 April 2021]
- Anguelov, N. (2015). The Dirty Side of the Garment Industry: Fast Fashion and Its Negative Impact on Environment and Society, *The Dirty Side of the Garment Industry: Fast Fashion and Its Negative Impact on Environment and Society*
- Araújo Vila, N., Fraiz Brea, J. A., & Pelegrín Borondo, J. (2021). Applying the UTAUT2 Model to a Non-Technological Service: The Case of Spa Tourism, 2, *Sustainability*, vol. 13, no. 2, p.803
- Argo, J. J., Dahl, D. W., & Morales, A. C. (2006). Consumer Contamination: How Consumers React to Products Touched by Others, *Journal of Marketing*, vol. 70, no. 2, pp.81–94

- Armstrong, C. M., Niinimäki, K., Kujala, S., Karell, E., & Lang, C. (2015). Sustainable Product-Service Systems for Clothing: Exploring Consumer Perceptions of Consumption Alternatives in Finland, *Journal of Cleaner Production*, vol. 97, pp.30–39
- Armstrong, C. M., Niinimäki, K., Lang, C., & Kujala, S. (2016). A Use-Oriented Clothing Economy? Preliminary Affirmation for Sustainable Clothing Consumption Alternatives, *Sustainable Development*, vol. 24, no. 1, pp.18–31
- Arrigo, E. (2021). Digital Platforms in Fashion Rental: A Business Model Analysis, *Journal of Fashion Marketing and Management: An International Journal*, [e-journal] vol. ahead-of-print, no. ahead-of-print, Available online: <https://doi.org/10.1108/JFMM-03-2020-0044> [Accessed 25 April 2021]
- Arts, J. W. C., Frambach, R. T., & Bijmolt, T. H. A. (2011). Generalizations on Consumer Innovation Adoption: A Meta-Analysis on Drivers of Intention and Behavior, *International Journal of Research in Marketing*, vol. 28, no. 2, pp.134–144
- Baek, E., & Oh, G.-E. (Grace). (2021). Diverse Values of Fashion Rental Service and Contamination Concern of Consumers, *Journal of Business Research*, vol. 123, pp.165–175
- Baghi, I., Gabrielli, V., & Codeluppi, V. (2013). Consumption Practices of Fast Fashion Products: A Consumer-Based Approach, *Journal of Fashion Marketing and Management*, vol. 17, pp.206–224
- Bagozzi, R. P. (2007). The Legacy of the Technology Acceptance Model and a Proposal for a Paradigm Shift., *Journal of the Association for Information Systems*, [e-journal] vol. 8, no. 4, Available online: <https://aisel.aisnet.org/jais/vol8/iss4/12> [Accessed 13 April 2021]
- Bardhi, F., & Arnould, E. (2005). Thrift Shopping: Combining Utilitarian Thrift and Hedonic Treat Benefits, *Journal of Consumer Behaviour*, vol. 4, pp.223–233
- Bardhi, F., & Eckhardt, G. M. (2012). Access-Based Consumption: The Case of Car Sharing, *Journal of Consumer Research*, vol. 39, no. 4, pp.881–898
- Bardhi, F., & Eckhardt, G. M. (2017). Liquid Consumption, *Journal of Consumer Research*, vol. 44, no. 3, pp.582–597
- Bardhi, F., Eckhardt, G. M., & Arnould, E. J. (2012). Liquid Relationship to Possessions, *Journal of Consumer Research*, vol. 39, no. 3, pp.510–529
- Barnes, L., & Lea-Greenwood, G. (2006). Fast Fashioning the Supply Chain: Shaping the Research Agenda, *Journal of Fashion Marketing and Management*, vol. 10, pp.259–271
- Bauman, Z. (2000). *Liquid Modernity*, 1st edition., Cambridge, UK: Malden, MA: Polity
- Baxter, W. L., Aurisicchio, M., & Childs, P. R. N. (2016). Materials, Use and Contaminated Interaction, *Materials & Design*, vol. 90, pp.1218–1227
- Becker-Leifhold, C. (2018). The Role of Values in Collaborative Fashion Consumption - A Critical Investigation through the Lenses of the Theory of Planned Behavior, *Journal of Cleaner Production*, vol. 199
- Becker-Leifhold, C., & Iran, S. (2018). Collaborative Fashion Consumption – Drivers, Barriers and Future Pathways, *Journal of Fashion Marketing and Management: An International Journal*, vol. 22, no. 2, pp.189–208
- Belk, R. (2010). Sharing, *Journal of Consumer Research*, vol. 36, no. 5, pp.715–734

- Belk, R. (2014). You Are What You Can Access: Sharing and Collaborative Consumption Online, *Journal of Business Research*, vol. 67, no. 8, pp.1595–1600
- Belk, R. W. (1988). Possessions and the Extended Self, *Journal of Consumer Research*, vol. 15, no. 2, pp.139–168
- Bell, E., Bryman, A., & Harley, B. (2018). Business Research Methods - Paperback - Emma Bell, Alan Bryman, Bill Harley - Oxford University Press, Available online: <https://global.oup.com/ukhe/product/business-research-methods-9780198809876?cc=se&lang=en> [Accessed 6 May 2021]
- Benjaafar, S., Kong, G., Li, X., & Courcoubetis, C. (2018). Peer-to-Peer Product Sharing: Implications for Ownership, Usage, and Social Welfare in the Sharing Economy, *Management Science*, vol. 65, no. 2, pp.477–493
- Benoit, S., Baker, T. L., Bolton, R. N., Gruber, T., & Kandampully, J. (2017). A Triadic Framework for Collaborative Consumption (CC): Motives, Activities and Resources & Capabilities of Actors, *Journal of Business Research*, vol. 79, pp.219–227
- Bhardwaj, V., & Fairhurst, A. (2010). Fast Fashion: Response to Changes in the Fashion Industry, *The International Review of Retail, Distribution and Consumer Research*, vol. 20, no. 1, pp.165–173
- Bianchi, C., & Birtwistle, G. (2012). Consumer Clothing Disposal Behaviour: A Comparative Study, *International Journal of Consumer Studies*, vol. 36, no. 3, pp.335–341
- Borg, D., Mont, O., & Schoonover, H. (2020). Consumer Acceptance and Value in Use-Oriented Product-Service Systems: Lessons from Swedish Consumer Goods Companies, *Sustainability*, vol. 12, no. 19
- Botsman, R., & Rogers, R. (2010). What's Mine Is Yours: The Rise of Collaborative Consumption, Illustrated edition., New York: Harper Business
- Brochado, A., Teiga, N., & Oliveira-Brochado, F. (2017). The Ecological Conscious Consumer Behaviour: Are the Activists Different?, *International Journal of Consumer Studies*, vol. 41, no. 2, pp.138–146
- Brown, S. A., & Venkatesh, V. (2005). Model of Adoption of Technology in Households: A Baseline Model Test and Extension Incorporating Household Life Cycle, *MIS Quarterly*, vol. 29, no. 3, pp.399–426
- Brydges, T., Heinze, L., Retamal, M., & Henninger, C. E. (2021). Platforms and the Pandemic: A Case Study of Fashion Rental Platforms during COVID-19, *The Geographical Journal*, vol. 187, no. 1, pp.57–63
- Bryman, A., & Bell, E. (2011). Business Research Methods, OUP Oxford
- Buckminster Fuller – Everything I know – Session 1 of 6 (1975). (2012). YouTube video, added by MitUnsDieZukunft [Online], Available at: <https://www.youtube.com/watch?v=h9nMMzErQhE> [Accessed 28 May 2021]
- Burns, R. P., & Burns, R. (2008). Business Research Methods and Statistics Using SPSS, SAGE
- Businesswire. (2020). Global Online Clothing Rental Market, Forecast to 2025 - ResearchAndMarkets.Com, Available online: <https://www.businesswire.com/news/home/20200505005656/en/Global-Online-Clothing-Rental-Market-Forecast-to-2025---ResearchAndMarkets.com> [Accessed 8 April 2021]

- Byrne, B. M. (2010). *Structural Equation Modeling with AMOS: Basic Concepts, Applications, and Programming*, 2nd Ed, New York, NY, US: Routledge/Taylor & Francis Group
- Cachon, G. P., & Swinney, R. (2011). The Value of Fast Fashion: Quick Response, Enhanced Design, and Strategic Consumer Behavior, *Management Science*, vol. 57, no. 4, pp.778–795
- Catulli, M. (2012). What Uncertainty? Further Insight into Why Consumers Might Be Distrustful of Product Service Systems, *Journal of Manufacturing Technology Management*, vol. 23, no. 6, pp.780–793
- Ceballos, L. M. (2011). Will ‘Eco-Fashion’ Take Off? A Survey of Potential Customers of Organic Cotton Clothes in London, *AD-minister*, pp.118–131
- Chakraborty, U. (2019). The Impact of Source Credible Online Reviews on Purchase Intention: The Mediating Roles of Brand Equity Dimensions, *Journal of Research in Interactive Marketing*, vol. 13, no. 2, pp.142–161
- Chan, E. (2020). Will The Fashion Rental Market Ever Recover From Covid-19?, *British Vogue*, Available online: <https://www.vogue.co.uk/fashion/article/will-the-fashion-rental-market-recover> [Accessed 19 May 2021]
- Chang, S.-C., Sun, C.-C., Pan, L.-Y., & Wang, M.-Y. (2015). An Extended TAM to Explore Behavioural Intention of Consumers to Use M-Commerce, *Journal of Information & Knowledge Management*, vol. 14, no. 2
- Chao, C.-M. (2019). Factors Determining the Behavioral Intention to Use Mobile Learning: An Application and Extension of the UTAUT Model, *Frontiers in Psychology*, [e-journal] vol. 10, Available online: <https://www.frontiersin.org/articles/10.3389/fpsyg.2019.01652/full> [Accessed 9 April 2021]
- Choi, T.-M., & He, Y. (2019). Peer-to-Peer Collaborative Consumption for Fashion Products in the Sharing Economy: Platform Operations, *Transportation Research Part E: Logistics and Transportation Review*, vol. 126, pp.49–65
- Claydon, S. (2017). Cotton, *Pesticide Action Network UK*, Available online: <https://www.pan-uk.org/cotton/> [Accessed 18 April 2021]
- Clube, R. K. M., & Tennant, M. (2020). Exploring Garment Rental as a Sustainable Business Model in the Fashion Industry: Does Contamination Impact the Consumption Experience?, *Journal of Consumer Behaviour*, vol. 19, no. 4, pp.359–370
- d’Astous, A., & Legendre, A. (2009). Understanding Consumers’ Ethical Justifications: A Scale for Appraising Consumers’ Reasons for Not Behaving Ethically, *Journal of Business Ethics*, vol. 87, no. 2, pp.255–268
- Darnall, N., Ponting, C., & Vazquez-Brust, D. (2012). Why Consumers Buy Green, pp.287–308
- DeCarlo, M. (2018). *Scientific Inquiry in Social Work*, [e-book] Open Social Work Education, Available online: <https://scientificinquiryinsocialwork.pressbooks.com/> [Accessed 10 May 2021]
- Durgee, J. F., & O’Connor, G. C. (1995). An Exploration into Renting as Consumption Behavior, *Psychology & Marketing*, vol. 12, no. 2, pp.89–104
- Dururu, J., Anderson, C., Bates, M., Montasser, W., & Tudor, T. (2015). Enhancing Engagement with Community Sector Organisations Working in Sustainable Waste Management: A Case Study, *Waste management & research: the journal of the International Solid Wastes and Public Cleansing Association, ISWA*, vol. 33, pp.284–90

- Dwivedi, Y. K., Rana, N. P., Jeyaraj, A., Clement, M., & Williams, M. D. (2019). Re-Examining the Unified Theory of Acceptance and Use of Technology (UTAUT): Towards a Revised Theoretical Model, *Information Systems Frontiers*, vol. 21, no. 3, pp.719–734
- Easterby-Smith, M., Thorpe, R., Jackson, P. R., & Jaspersen, L. J. (2018). Management and Business Research, *SAGE Publications Ltd*, Available online: <https://uk.sagepub.com/en-gb/eur/management-and-business-research/book258074> [Accessed 6 May 2021]
- Ekström, K., Ottosson, M., & Parment, A. (2017). Consumer Behavior - Classical and Contemporary perspectives, *Bokus.com*, Available online: <https://www.bokus.com/bok/9789144116815/consumer-behavior-classical-and-contemporary-perspectives/> [Accessed 27 May 2021]
- Enaizan, B., Mohammed, A. G., Alnoor, A., Alaboodi, A. S., & Enaizan, O. (2019). Customer Acceptance of Mobile Marketing in Jordan: An Extended UTAUT2 Model with Trust and Risk Factors, *International Journal of Engineering Business Management*, vol. 11
- Felson, M., & Spaeth, J. L. (1978). Community Structure and Collaborative Consumption: A Routine Activity Approach, *American Behavioural Scientist*, vol. 21, no. 4, pp.614–624, Available online: <https://journals.sagepub.com/doi/10.1177/000276427802100411> [Accessed 13 April 2021]
- Feng, Y., Tan, Y. (Ricky), Duan, Y., & Bai, Y. (2020). Strategies Analysis of Luxury Fashion Rental Platform in Sharing Economy, *Transportation Research Part E: Logistics and Transportation Review*, vol. 142
- Figge, F., Young, C., & Barkemeyer, R. (2014). Sufficiency or Efficiency to Achieve Lower Resource Consumption and Emissions? The Role of the Rebound Effect, *Journal of Cleaner Production*, vol. 69, pp.216–224
- Fisher, T., Cooper, T., Woodward, S., Hiller, A., & Goworek, H. (2008). Public Understanding of Sustainable Clothing: Report to the Department for Environment, Food and Rural Affairs
- Fletcher, K. (2008). Sustainable Fashion and Textiles: Design Journeys, 1<sup>st</sup> edn, London ; Sterling, VA: Earthscan Publications Ltd
- Fritsche, I., Barth, M., Jugert, P., Masson, T., & Reese, G. (2018). A Social Identity Model of Pro-Environmental Action (SIMPEA), *Psychological Review*, vol. 125, no. 2, pp.245–269
- Gansky, L. (2010). The Mesh: Why the Future of Business Is Sharing, New York: Portfolio
- Gansser, O. A., & Reich, C. S. (2021). A New Acceptance Model for Artificial Intelligence with Extensions to UTAUT2: An Empirical Study in Three Segments of Application, *Technology in Society*, vol. 65
- Gao, Y., Li, H., & Luo, Y. (2015). An Empirical Study of Wearable Technology Acceptance in Healthcare, *Industrial Management & Data Systems*, vol. 115, no. 9, pp.1704–1723
- Garcia, H. (2013). Consumption 2.0, *The Futurist Volume*, [e-journal] vol. 47, no. 1, Available online: <https://search.proquest.com/docview/1267121080?pq-origsite=gscholar&fromopenview=true> [Accessed 16 April 2021]
- Gentina, E. (2014). Understanding the Effects of Adolescent Girls' Social Positions within Peer Groups on Exchange Practices, *Journal of Consumer Behaviour*, vol. 13, no. 1, pp.73–80
- Gifford, R., & Nilsson, A. (2014). Personal and Social Factors That Influence Pro-Environmental Concern and Behaviour: A Review, *International journal of psychology: Journal international de Psychologie*, vol. 49, no. 3, pp.141–57

- Gilg, A., Barr, S., & Ford, N. (2005). Green Consumption or Sustainable Lifestyles? Identifying the Sustainable Consumer, *Futures*, vol. 37, no. 6, pp.481–504
- Global Fashion Agenda. (2019). Pulse of the Fashion Industry 2019 — GLOBAL FASHION AGENDA, Available online: <https://www.globalfashionagenda.com/report/pulse-2019-update/> [Accessed 17 April 2021]
- Graf, V., & Gimpel, H. (2017). The Role of Sustainability in Consumers' Acceptance of Technology, 4<sup>th</sup> Conference on Energy Informatics & Management, Available online: [https://www.researchgate.net/publication/336086248\\_The\\_Role\\_of\\_Sustainability\\_in\\_Consumers'\\_Acceptance\\_of\\_Technology\\_The\\_Role\\_of\\_Sustainability\\_in\\_Consumers'\\_Acceptance\\_of\\_Technology\\_The\\_Role\\_of\\_Sustainability\\_in\\_Consumers'\\_Acceptance\\_of\\_Technology](https://www.researchgate.net/publication/336086248_The_Role_of_Sustainability_in_Consumers'_Acceptance_of_Technology_The_Role_of_Sustainability_in_Consumers'_Acceptance_of_Technology_The_Role_of_Sustainability_in_Consumers'_Acceptance_of_Technology) [Accessed 11 April 2021]
- Grewal, D., Monroe, K., & Krishnan, R. (1998). The Effects of Price Comparison Advertising on Buyers' Perceptions of Acquisition Value and Transaction Value, *The Journal of Marketing*, vol. 62, no.2, pp.46–59
- Grimshorn, C., & Jordan, M. (2015). Ownership - a Challenged Consumer Ideal. A Study of Two Collaborative Consumption Practices: Clothes Swapping and Clothing Libraries, [e-journal], Available online: <http://lup.lub.lu.se/student-papers/record/5468892> [Accessed 28 March 2021]
- Gunawan, A., Muchardie, B. G., & Liawinardi, K. (2019). Millennial Behavioral Intention To Adopt E-Book Using Utaut2 Model, 2019 International Conference on Information Management and Technology (ICIMTech), pp.98–102, Available online: <https://ieeexplore.ieee.org/document/8843826> [Accessed 11 April 2021]
- Guzzetti, A., Crespi, R., & Belvedere, V. (2021). “Please Don’t Buy!”: Consumers Attitude to Alternative Luxury Consumption, *Strategic Change*, vol. 30, no. 1, pp.67–78
- Ha, S., & Stoel, L. (2009). Consumer E-Shopping Acceptance: Antecedents in a Technology Acceptance Model, *Journal of Business Research*, vol. 62, no. 5, pp.565–571
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010). *Multivariate Data Analysis: Global Edition*, 7<sup>th</sup> edn, Pearson, Available online: <https://www.pearson.com/uk/educators/higher-education-educators/program/Hair-Multivariate-Data-Analysis-Global-Edition-7th-Edition/PGM916641.html> [Accessed 20 May 2021]
- Hamari, J., Sjöklint, M., & Ukkonen, A. (2016). The Sharing Economy: Why People Participate in Collaborative Consumption, *Journal of the Association for Information Science and Technology*, vol. 67, no. 9, pp.2047–2059
- Hawlitshchek, F., Teubner, T., & Gimpel, H. (2018). Consumer Motives for Peer-to-Peer Sharing, *Journal of Cleaner Production*, vol. 204, pp.144–157
- Hazée, S., Van Vaerenbergh, Y., Delcourt, C., & Warlop, L. (2019). Sharing Goods? Yuck, No! An Investigation of Consumers' Contamination Concerns About Access-Based Services, *Journal of Service Research*, vol. 22, no. 3, pp.256–271
- Henninger, C. E., Bürklin, N., & Niinimäki, K. (2019). The Clothes Swapping Phenomenon – When Consumers Become Suppliers, *Journal of Fashion Marketing and Management: An International Journal*, vol. 23, no. 3, pp.327–344
- Hertwich, E., & Katzmayer, M. (2004). Examples of Sustainable Consumption: Review, Classification and Analysis, Available online: <https://ntnuopen.ntnu.no/ntnu-xmlui/handle/11250/242703> [Accessed 7 May 2021]

- Hiller, K. (2011). Exploring Consumers' Perceptions of Eco-Conscious Apparel Acquisition Behaviors, *Social Responsibility Journal*, vol. 7, pp.61–73
- Hinterberger, F., Luks, F., & Schmidt-Bleek, F. (1997). Material Flows vs. 'natural Capital': What Makes an Economy Sustainable?, *Ecological Economics*, vol. 23, no. 1, pp.1–14
- Holbrook, M. B., & Hirschman, E. C. (1982). The Experiential Aspects of Consumption: Consumer Fantasies, Feelings, and Fun, *Journal of Consumer Research*, vol. 9, no. 2, pp.132–140
- Hong, I. B., & Cha, H. S. (2013). The Mediating Role of Consumer Trust in an Online Merchant in Predicting Purchase Intention, *International Journal of Information Management*, vol. 33, no. 6, pp.927–939
- House of Commons Environmental Audit Committee. (2019). Fixing Fashion: Clothing Consumption and Sustainability - Report Summary - Environmental Audit Committee, Available online: <https://publications.parliament.uk/pa/cm201719/cmselect/cmenvaud/1952/report-summary.html> [Accessed 17 April 2021]
- Hu, S., Henninger, C., Boardman, R., & Ryding, D. (2019). Challenging Current Fashion Business Models: Entrepreneurship Through Access-Based Consumption in the Second-Hand Luxury Garment Sector Within a Circular Economy, pp.39–54
- Hu, Z.-H., Li, Q., Chen, X.-J., & Wang, Y.-F. (2014). Sustainable Rent-Based Closed-Loop Supply Chain for Fashion Products, 10, *Sustainability*, vol. 6, no. 10, pp.7063–7088
- Hunt, S., & Hansen, J. (2008). The Philosophical Foundations of Marketing Research: For Scientific Realism and Truth
- Hwang, J., & Griffiths, M. A. (2017). Share More, Drive Less: Millennials Value Perception and Behavioral Intent in Using Collaborative Consumption Services, *Journal of Consumer Marketing*, vol. 34, no. 2, pp.132–146
- Iran, S., & Schrader, U. (2017). Collaborative Fashion Consumption and Its Environmental Effects, *Journal of Fashion Marketing and Management: An International Journal*, vol. 21, no. 4, pp.468–482
- Isla, V. (2013). Investigating Second-Hand Fashion Trade and Consumption in the Philippines: Expanding Existing Discourses, *Journal of Consumer Culture*, vol. 13, pp.221–240
- Jackson, D. L., Gillaspay Jr., J. A., & Purc-Stephenson, R. (2009). Reporting Practices in Confirmatory Factor Analysis: An Overview and Some Recommendations, *Psychological Methods*, vol. 14, no. 1, pp.6–23
- Jaye, M. (2020). Peer-to-Peer Fashion Rental: Is It Worth It?, *TheIndustry.Fashion*, Available online: <https://www.theindustry.fashion/peer-to-peer-fashion-rental-is-it-worth-it/> [Accessed 24 April 2021]
- Jenß, H. (2004). Dressed in History: Retro Styles and the Construction of Authenticity in Youth Culture, *Fashion Theory: The Journal of Dress, Body & Culture*, vol. 8, pp.387–403
- Johnson, K. K. P., Mun, J. M., & Chae, Y. (2016). Antecedents to Internet Use to Collaboratively Consume Apparel, *Journal of Fashion Marketing and Management: An International Journal*, vol. 20, no. 4, pp.370–382
- Joung, H.-M. (2014). Fast-Fashion Consumers' Post-Purchase Behaviours, *International Journal of Retail & Distribution Management*, vol. 42, no. 8, pp.688–697
- Joy, A., Sherry, J. F., Venkatesh, A., Wang, J., & Chan, R. (2012). Fast Fashion, Sustainability, and the Ethical Appeal of Luxury Brands, *Fashion Theory*, vol. 16, no. 3, pp.273–295

- Kang, J., & Hustvedt, G. (2014). Building Trust Between Consumers and Corporations: The Role of Consumer Perceptions of Transparency and Social Responsibility, *Journal of Business Ethics*, vol. 125, no. 2, pp.253–265
- Kaur, K., Osman, S., Bakar, E., Fazli, M., & Singh, J. (2020). Theoretical Framework Development Of Users Adoption Of Omni-Channel Retailing Of Fashion Apparels Based On UTAUT2 And The Role Of Personal Innovativeness, Brand Image And Fashion Involvement, 20<sup>th</sup> Kuala Lumpur International Business, Economics and Law Conference, Available online: [https://www.researchgate.net/publication/342351980\\_THEORETICAL\\_FRAMEWORK\\_DEVELOPMENT\\_ON\\_USERS\\_ADOPTION\\_OF\\_OMNI-CHANNEL\\_RETAILING\\_OF\\_FASHION\\_APPARELS\\_BASED\\_ON\\_UTAUT2\\_AND\\_THE\\_ROLE\\_OF\\_PERSONAL\\_INNOVATIVENESS\\_BRAND\\_IMAGE\\_AND\\_FASHI\\_ON\\_INVOLVEMENT/link/5eefffd5a6fdcc73be942b82/download](https://www.researchgate.net/publication/342351980_THEORETICAL_FRAMEWORK_DEVELOPMENT_ON_USERS_ADOPTION_OF_OMNI-CHANNEL_RETAILING_OF_FASHION_APPARELS_BASED_ON_UTAUT2_AND_THE_ROLE_OF_PERSONAL_INNOVATIVENESS_BRAND_IMAGE_AND_FASHI_ON_INVOLVEMENT/link/5eefffd5a6fdcc73be942b82/download) [Accessed 11 May 2021]
- Kaushik, V., Khare, A., Boardman, R., & Cano, M. B. (2020). Why Do Online Retailers Succeed? The Identification and Prioritization of Success Factors for Indian Fashion Retailers, *Electronic Commerce Research and Applications*, vol. 39, p.1–15
- Khare, A. (2015). Antecedents to Green Buying Behaviour: A Study on Consumers in an Emerging Economy, *Marketing Intelligence & Planning*, vol. 33, no. 3, pp.309–329
- Kim, H., Choo, H., & Yoon, N. (2013). The Motivational Drivers of Fast Fashion Avoidance, *Journal of Fashion Marketing and Management*, vol. 17
- Kim, N. L., & Jin, B. E. (2019). Addressing the Contamination Issue in Collaborative Consumption of Fashion: Does Ownership Type of Shared Goods Matter?, *Journal of Fashion Marketing and Management: An International Journal*, [e-journal] vol. 25, no. 2, p.242–256 , Available online: <https://doi.org/10.1108/JFMM-11-2019-0265> [Accessed 9 April 2021]
- Kirk, C. P., & Rifkin, L. S. (2020). I'll Trade You Diamonds for Toilet Paper: Consumer Reacting, Coping and Adapting Behaviors in the COVID-19 Pandemic, *Journal of Business Research*, vol. 117, pp.124–131
- Koenig-Lewis, N., Marquet, M., Palmer, A., & Zhao, A. L. (2015). Enjoyment and Social Influence: Predicting Mobile Payment Adoption, *The Service Industries Journal*, vol. 35, no. 10, pp.537–554
- Kumar, V., Lahiri, A., & Dogan, O. B. (2018). A Strategic Framework for a Profitable Business Model in the Sharing Economy, *Industrial Marketing Management*, vol. 69, pp.147–160.
- Laili, W., Li, Y., & He, W. (2017). The Energy Footprint of China's Textile Industry: Perspectives from Decoupling and Decomposition Analysis, *Energies*, vol. 10, p.1461
- Lamberton, C. P., & Rose, R. L. (2012). When Is Ours Better than Mine? A Framework for Understanding and Altering Participation in Commercial Sharing Systems, *Journal of Marketing*, vol. 76, no. 4, pp.109–125
- Lang, C. (2018). Perceived Risks and Enjoyment of Access-Based Consumption: Identifying Barriers and Motivations to Fashion Renting, *Fashion and Textiles*, vol. 5
- Lang, C., & Joyner Armstrong, C. M. (2018). 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*, vol. 13, pp.37–47

- Lang, C., Seo, S., & Liu, C. (2019). Motivations and Obstacles for Fashion Renting: A Cross-Cultural Comparison, *Journal of Fashion Marketing and Management: An International Journal*, vol. 23, no. 4, pp.519–536
- Lawson, S. J., Gleim, M. R., Perren, R., & Hwang, J. (2016). Freedom from Ownership: An Exploration of Access-Based Consumption, *Journal of Business Research*, vol. 69, no. 8, pp.2615–2623
- Lee, M. (2009). Understanding the behavioural intention to play online games: An extension of the theory of planned behaviour, *Online Information Review*, vol. 33, no. 5, pp.849–872
- Lee, S. E., Jung, H. J., & Lee, K.-H. (2021). Motivating Collaborative Consumption in Fashion: Consumer Benefits, Perceived Risks, Service Trust, and Usage Intention of Online Fashion Rental Services, *Sustainability*, vol. 13, no. 4, p.1804
- Lee, S. H., & Huang, R. (2020a). Exploring the Motives for Online Fashion Renting: Insights from Social Retailing to Sustainability, *Sustainability*, vol. 12, no. 18, p.7610
- Lee, S. H., & Huang, R. (2020b). Consumer Responses to Online Fashion Renting: Exploring the Role of Cultural Differences, *International Journal of Retail & Distribution Management*, vol. 49, no. 2, pp.187–203
- Lee, S. H. N., & Chow, P.-S. (2020). Investigating Consumer Attitudes and Intentions toward Online Fashion Renting Retailing, *Journal of Retailing and Consumer Services*, vol. 52
- Lee, S., Lee, C., & Lee, M. (2016). The Effect of Online Supporter's Review Directions on Consumers' Brand Attitude and Purchase Intention: The Role of Brand Awareness, *Journal of Fashion Business*, vol. 20, no. 6, pp.135–147
- Lenhart, A., Purcell, K., Smith, A., & Zickuhr, K. (2010). Social Media & Mobile Internet Use among Teens and Young Adults. Millennials., *undefined*, [e-journal], Available online: /paper/Social-Media-%26-Mobile-Internet-Use-among-Teens-and-Lenhart-Purcell/355eaf95e3adb0343957255b279d87f65d946329 [Accessed 3 April 2021]
- Lietz, P. (2010). Research into Questionnaire Design: A Summary of the Literature, *International Journal of Market Research*, vol. 52, no. 2, pp.249–272
- Limsupanark, J., Ming, X., & Pangam, P. (2017). Study on the Influence of Customers' Risk Perception on the Use of Leasing Services Based on the Burden of Ownership, *International Business Research*, vol. 10, p.147
- Little, J. (2019). Hire calling: why rental fashion is taking off, *The Guardian*, Available online: <http://www.theguardian.com/fashion/2019/jul/29/hire-calling-why-rental-fashion-is-taking-off> [Accessed 21 April 2021]
- Lorek, S., & Spangenberg, J. H. (2014). Sustainable Consumption within a Sustainable Economy – beyond Green Growth and Green Economies, *Journal of Cleaner Production*, vol. 63, pp.33–44
- Lu, L.-C., Chang, W.-P., & Chang, H.-H. (2014). Consumer Attitudes toward Blogger's Sponsored Recommendations and Purchase Intention: The Effect of Sponsorship Type, Product Type, and Brand Awareness, *Computers in Human Behavior*, vol. 34, pp.258–266
- Luján-Ornelas, C., Güereca, L. P., Franco-García, M.-L., & Heldeweg, M. (2020). A Life Cycle Thinking Approach to Analyse Sustainability in the Textile Industry: A Literature Review, *Sustainability*, vol. 12, no. 23

- Malhotra, N. K. (2010). *Marketing Research: An Applied Orientation*, 6<sup>th</sup> edn, Available online: [/content/one-dot-com/one-dot-com/us/en/higher-education/program.html](https://content.one-dot-com/one-dot-com/us/en/higher-education/program.html) [Accessed 6 May 2021]
- Malhotra, N. K., & Birks, D. F. (2005). *Marketing Research: An Applied Approach - European*, 2<sup>nd</sup> edn., Harlow: Ft Pr
- Martin, M., Lazarevic, D., & Gullstrom, C. (2019). Assessing the Environmental Potential of Collaborative Consumption: Peer-to-Peer Product Sharing in Hammarby Sjöstad, Sweden, *Sustainability*, vol. 11, p.190
- McDowell, M. (2019). What to Know about “Clothing as a Service”, *Vogue Business*, Available online: <https://www.voguebusiness.com/technology/clothing-as-service-caas-rental-rent-the-runway> [Accessed 21 April 2021]
- McNeill, L., & Moore, R. (2015). Sustainable Fashion Consumption and the Fast Fashion Conundrum: Fashionable Consumers and Attitudes to Sustainability in Clothing Choice, *International Journal of Consumer Studies*, vol. 39, no. 3, pp.212–222
- McNeill, L., & Venter, B. (2019). Identity, Self-Concept and Young Women’s Engagement with Collaborative, Sustainable Fashion Consumption Models, *International Journal of Consumer Studies*, vol. 43, no. 4, pp.368–378
- Merriam-Webster Dictionary. (2021). Definition of TECHNOLOGY, Available online: <https://www.merriam-webster.com/dictionary/technology> [Accessed 12 April 2021]
- Meyersohn, N. (2019). First on CNN Business: Banana Republic Joins the Clothing Rental Craze, *CNN*, Available online: <https://www.cnn.com/2019/08/16/business/banana-republic-clothing-rental/index.html> [Accessed 21 April 2021]
- Mont, O., Dalhammar, C., & Jacobsson, N. (2006). A New Business Model for Baby Prams Based on Leasing and Product Remanufacturing, *Journal of Cleaner Production*, vol. 14, no. 17, pp.1509–1518
- Moss, V. (2019). Would You Pay To Wear A Stranger’s Clothes?, *British Vogue*, Available online: <https://www.vogue.co.uk/fashion/article/fashion-rental-apps> [Accessed 24 April 2021]
- Mukendi, A., & Henninger, C. E. (2020). Exploring the Spectrum of Fashion Rental, *Journal of Fashion Marketing and Management: An International Journal*, vol. 24, no. 3, pp.455–469
- Na’amneh, M., & Al-Husban, A. (2012). Identity in Old Clothes: The Socio-Cultural Dynamics of Second-Hand Clothing in Irbid, Jordan, *Social Identities*, vol. 18
- Niinimäki, K. (2010). Eco-Clothing, Consumer Identity and Ideology, *Sustainable Development*, vol. 18, pp.150–162
- Niinimäki, K. (2014). Green Aesthetics in Clothing: Normative beauty in commodities. *Artifact*, vol. 3, no. 3, pp.3.1–3.13
- Niinimäki, K., Peters, G., Dahlbo, H., Perry, P., Rissanen, T., & Gwilt, A. (2020). The Environmental Price of Fast Fashion, 4, *Nature Reviews Earth & Environment*, vol. 1, no. 4, pp.189–200
- Oh, H., Fiore, A., & Jeong, M. (2007). Measuring Experience Economy Concepts: Tourism Applications, *Journal of Travel Research*, vol. 46
- Pantano, E., & Stylos, N. (2020). The Cinderella Moment: Exploring Consumers’ Motivations to Engage with Renting as Collaborative Luxury Consumption Mode, *Psychology and Marketing*, vol. 37, no. 5, pp.740–753

- Park, H., & Armstrong, C. M. J. (2017). Collaborative Apparel Consumption in the Digital Sharing Economy: An Agenda for Academic Inquiry, *International Journal of Consumer Studies*, vol. 41, no. 5, pp.465–474
- Park, H., & Joyner Armstrong, C. M. (2019a). Is Money the Biggest Driver? Uncovering Motives for Engaging in Online Collaborative Consumption Retail Models for Apparel, *Journal of Retailing and Consumer Services*, vol. 51, pp.42–50
- Park, H., & Joyner Armstrong, C. M. (2019b). Will “No-Ownership” Work for Apparel?: Implications for Apparel Retailers, *Journal of Retailing and Consumer Services*, vol. 47, pp.66–73
- Pascual-Miguel, F. J., Agudo-Peregrina, Á. F., & Chaparro-Peláez, J. (2015). Influences of Gender and Product Type on Online Purchasing, *Journal of Business Research*, vol. 68, no. 7, pp.1550–1556
- Pedersen, E., & Andersen, K. (2015). Sustainability Innovators and Anchor Draggers: A Global Expert Study on Sustainable Fashion, *Journal of Fashion Marketing and Management: An International Journal*, vol. 19, pp.315–327
- Pedersen, E. R. G., & Netter, S. (2015). Collaborative Consumption: Business Model Opportunities and Barriers for Fashion Libraries, *Journal of Fashion Marketing and Management*, vol. 19, no. 3, pp.258–273.
- Perea y Monsuwé, T., Dellaert, B. G. C., & de Ruyter, K. (2004). What Drives Consumers to Shop Online? A Literature Review, *International Journal of Service Industry Management*, vol. 15, no. 1, pp.102–121
- Perlacia, A., Duml, V., & Saebi, T. (2016). Collaborative Consumption: Live Fashion, Don’t Own It - Developing New Business Models for the Fashion Industry, SSRN Scholarly Paper, ID 2860021, Rochester, NY: Social Science Research Network, Available online: <https://papers.ssrn.com/abstract=2860021> [Accessed 29 March 2021]
- Perneger, T. V., Courvoisier, D. S., Hudelson, P. M., & Gayet-Ageron, A. (2015). Sample Size for Pre-Tests of Questionnaires, *Quality of Life Research*, vol. 24, no. 1, pp.147–151
- Perry, A., & Chung, T. (2016). Understand Attitude-Behavior Gaps and Benefit-Behavior Connections in Eco-Apparel, *Journal of Fashion Marketing and Management*, vol. 20, no. 1, pp.105–119
- Piarna, R., Fathurohman, F., & Purnawan, N. (2020). Understanding Online Shopping Adoption: The Unified Theory of Acceptance and the Use of Technology with Perceived Risk in Millennial Consumers Context, *JEMA: Jurnal Ilmiah Bidang Akuntansi dan Manajemen*, vol. 17, p.51
- Prothero, A. (1996). Environmental Decision Making: Research Issues in the Cosmetics and Toiletries Industry, *Marketing Intelligence & Planning*, vol. 14, no. 2, pp.19–25
- Puiu, A.-I. (2020). Motivations of Young Consumers to Participate to Collaborative Consumption, *Journal of Social & Economic Statistics*, vol. 9, no. 2, pp.43–55
- Quantis. (2018). Measuring Fashion: Insights from the Environmental Impact of the Global Apparel and Footwear Industries, *Quantis*, Available online: <https://quantis-intl.com/report/measuring-fashion-report/> [Accessed 18 April 2021]
- Quoquab, F., & Mohammad, J. (2016). Sustainable Consumption: Sacrificing for the Future, *Procedia - Social and Behavioral Sciences*, vol. 224, pp.599–604

- Rent The Runway. (2021). Homepage Rent The Runway, Available online: <https://www.renttherunway.com/> [Accessed 21 April 2021]
- Rexfelt, O., & Hiort af Ornäs, V. (2009). Consumer Acceptance of Product-Service Systems: Designing for Relative Advantages and Uncertainty Reductions, *Journal of Manufacturing Technology Management*, vol. 20, pp.674–699
- Ritch, E. (2015). Consumers Interpreting Sustainability: Moving beyond Food to Fashion, *International Journal of Retail & Distribution Management*, vol. 43, pp.1162–1181
- Ritzer, G., & Jurgenson, N. (2010). Production, Consumption, Prosumption: The Nature of Capitalism in the Age of the Digital ‘Prosumer’, *Journal of Consumer Culture*, vol. 10, no. 1, pp.13–36
- Ro, C. (2020). Can Fashion Ever Be Sustainable? - BBC Future, Available online: <https://www.bbc.com/future/article/20200310-sustainable-fashion-how-to-buy-clothes-good-for-the-climate> [Accessed 4 April 2021]
- Roberts-Islam, B. (2019). This Startup Wants To Be The Airbnb Of Fashion, *Forbes*, Available online: <https://www.forbes.com/sites/brookerobertsislam/2019/03/08/this-startup-wants-to-be-the-airbnb-of-fashion/> [Accessed 25 April 2021]
- Rodrigues, J. (2019). Is Renting Clothes the Future of Fast Fashion?, *The National*, Available online: <https://www.thenationalnews.com/lifestyle/fashion/is-renting-clothes-the-future-of-fast-fashion-1.947438> [Accessed 8 April 2021]
- Roos, S., Jönsson, C., Posner, S., Arvidsson, R., & Svanström, M. (2019). An Inventory Framework for Inclusion of Textile Chemicals in Life Cycle Assessment, *The International Journal of Life Cycle Assessment*, vol. 24.
- Roux, D., & Guiot, D. (2011). Second-Hand Markets as Alternative Forms Of Retailing, pp.427-442
- Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research Methods for Business Students*, 5<sup>th</sup> edn, New York: Prentice Hall
- Schaltegger, S., & Hörisch, J. (2017). In Search of the Dominant Rationale in Sustainability Management: Legitimacy- or Profit-Seeking?, *Journal of Business Ethics*, vol. 145, no. 2, pp.259–276
- Schor, J. B., & Fitzmaurice, C. J. (2015). Collaborating and Connecting: The Emergence of the Sharing Economy, *Handbook of Research on Sustainable Consumption*, [e-journal], Available online: <https://www.elgaronline.com/view/edcoll/9781783471263/9781783471263.00039.xml> [Accessed 13 April 2021]
- Sekaran, U., & Bougie, R. (2016). *Research Methods For Business: A Skill Building Approach*, John Wiley & Sons
- Shrivastava, A., Jain, G., Kamble, S. S., & Belhadi, A. (2021). Sustainability through Online Renting Clothing: Circular Fashion Fueled by Instagram Micro-Celebrities, *Journal of Cleaner Production*, vol. 278
- Siegle, L. (2011). *To Die for: Is Fashion Wearing Out the World?*, London: Fourth Estate
- Silva, S. C., Santos, A., Duarte, P., & Vlačić, B. (2021). The Role of Social Embarrassment, Sustainability, Familiarity and Perception of Hygiene in Second-Hand Clothing Purchase Experience, *International Journal of Retail & Distribution Management*, [e-journal] vol.

ahead-of-print, no. ahead-of-print, Available online: <https://doi.org/10.1108/IJRDM-09-2020-0356> [Accessed 30 April 2021]

- Singh, J. J., Iglesias, O., & Batista-Foguet, J. M. (2012). Does Having an Ethical Brand Matter? The Influence of Consumer Perceived Ethicality on Trust, Affect and Loyalty, *Journal of Business Ethics*, vol. 111, no. 4, pp.541–549
- Singh, M., & Matsui, Y. (2017). How Long Tail and Trust Affect Online Shopping Behavior: An Extension to UTAUT2 Framework, *Pacific Asia Journal of the Association for Information Systems*, vol. 9, pp.1–24
- Šiuškaitė, D., Pilinkienė, V., & Žvirdauskas, D. (2019). The Conceptualization of the Sharing Economy as a Business Model, 3, *Engineering Economics*, vol. 30, no. 3, pp.373–381
- Skov, L., & Koefoed, O. (2010). Sustainability in Fashion, *Openwear : Sustainability, Openness and P2P Production in the World of Fashion*, pp.64–82
- Slade, E., Williams, M., Dwivedi, Y., & Piercy, N. (2015). Exploring Consumer Adoption of Proximity Mobile Payments, *Journal of Strategic Marketing*, vol. 23, no. 3, pp.209–223.
- Speck, M., & Hasselkuß, M. (2015). Sufficiency in Social Practice: Searching Potentials for Sufficient Behavior in a Consumerist Culture, *Sustainability: Science, Practice and Policy*, vol. 11, no.2, pp.14–32
- Stanley, L. R., Lasonde, K. M., & Weiss, J. (1996). The Relationship Between Environmental Issue Involvement and Environmentally-Conscious Behavior: An Exploratory Study, *ACR North American Advances*, [e-journal] vol. NA-23, Available online: <https://www.acrwebsite.org/volumes/7940/volumes/v23/NA-23/full> [Accessed 6 May 2021]
- Strähle, J. (2017). Green Fashion Retail, in J. Strähle (ed.), *Green Fashion Retail*, [e-book] Singapore: Springer, pp.1–6, Available online: [https://doi.org/10.1007/978-981-10-2440-5\\_1](https://doi.org/10.1007/978-981-10-2440-5_1) [Accessed 15 April 2021]
- Suki, N., & Suki, N. M. (2007). Online Buying Innovativeness: Effects of Perceived Value, Perceived Risk and Perceived Enjoyment, *undefined*, [e-journal], Available online: [/paper/Online-buying-innovativeness%3A-effects-of-perceived-Suki-Suki/24d637f3d0a066b00f08aab069a265e889b4628b](http://paper/Online-buying-innovativeness%3A-effects-of-perceived-Suki-Suki/24d637f3d0a066b00f08aab069a265e889b4628b) [Accessed 23 April 2021]
- Sweeney, J., & Soutar, G. (2001). Consumer Perceived Value: The Development of a Multiple Item Scale, *Journal of Retailing*, vol. 77, no.2, pp.203–220
- Tabachnick, B. G., & Fidell, L. S. (2019). Using Multivariate Statistics, 7<sup>th</sup> edn, *Pearson*, Available online: <https://www.pearson.com/us/higher-education/program/Tabachnick-Using-Multivariate-Statistics-7th-Edition/PGM2458367.html> [Accessed 27 May 2021]
- Tamilmani, K., Rana, N. P., & Dwivedi, Y. K. (2020). Consumer Acceptance and Use of Information Technology: A Meta-Analytic Evaluation of UTAUT2, *Information Systems Frontiers*, [e-journal], Available online: <https://doi.org/10.1007/s10796-020-10007-6> [Accessed 14 April 2021]
- Tarhini, A., Alalwan, A. A., Al-Qirim, N., Algharabat, R., & Masa'deh, R. (2018). An Analysis of the Factors Influencing the Adoption of Online Shopping, *International Journal of Technology Diffusion (IJTD)*, vol. 9, no. 3, pp.68–87
- Tarhini, A., El-Masri, M., Ali, M., & Serrano, A. (2016). Extending the UTAUT Model to Understand the Customers' Acceptance and Use of Internet Banking in Lebanon: A Structural Equation Modeling Approach, *Information Technology & People*, vol. 29, no. 4, pp.830–849

- Thompson, C. J., & Haytko, D. L. (1997). Speaking of Fashion: Consumers' Uses of Fashion Discourses and the Appropriation of Countervailing Cultural Meanings, *Journal of Consumer Research*, vol. 24, no. 1, pp.15–42
- Toni, M., Renzi, M. F., & Mattia, G. (2017). Understanding the Link between Collaborative Economy and Sustainable Behaviour: An Empirical Investigation, *Journal of Cleaner Production*, vol. 172, pp.4467–4477
- Tsarenko, Y., Ferraro, C., Sands, S., & McLeod, C. (2013). Environmentally Conscious Consumption: The Role of Retailers and Peers as External Influences, *Journal of Retailing and Consumer Services*, vol. 20, no. 3, pp.302–310
- Tu, J.-C., & Hu, C.-L. (2018). A Study on the Factors Affecting Consumers' Willingness to Accept Clothing Rentals, 11, *Sustainability*, vol. 10, no. 11
- Tukker, A., & Tischner, U. (2006). Product-Services as a Research Field: Past, Present and Future. Reflections from a Decade of Research, *Journal of Cleaner Production*, vol. 14, no. 17, pp.1552–1556
- Tversky, A., & Kahneman, D. (1974). Judgment under Uncertainty: Heuristics and Biases, *Science*, vol. 185, no. 4157, pp.1124–1131
- Unglesbee, B., Howland, D., & Vembar. (2020). The Impact of the Coronavirus on Retail, *Retail Dive*, Available online: <https://www.retaildive.com/news/the-impact-of-the-coronavirus-on-retail/573522/> [Accessed 22 April 2021]
- United Nations Framework Convention on Climate Change. (2018). UN Helps Fashion Industry Shift to Low Carbon | UNFCCC, Available online: <https://unfccc.int/news/un-helps-fashion-industry-shift-to-low-carbon> [Accessed 27 May 2021]
- Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User Acceptance of Information Technology: Toward a Unified View, *MIS Quarterly*, vol. 27, no. 3, pp.425–478
- Venkatesh, V., Thong, J. Y. L., & Xu, X. (2012). Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology, *MIS Quarterly*, vol. 36, no. 1, pp.157–178
- Vijayarath, L. R. (2002). Product Characteristics and Internet Shopping Intentions, *Internet Research*, vol. 12, no. 5, pp.411–426
- Wahnbaeck, C. (2015). Fast Fashion versus grüne Mode, Greenpeace, Available online: <https://www.greenpeace.de/themen/endlager-umwelt/fast-fashion-versus-gruene-mode> [Accessed 16 April 2021]
- Waight, E. (2013). Eco babies: Reducing a parent's ecological footprint with second-hand consumer goods, *International Journal of Green Economics*, vol. 7, no. 2, pp.197–211
- White, K., Lin, L., Dahl, D. W., & Ritchie, R. J. B. (2016). When Do Consumers Avoid Imperfections? Superficial Packaging Damage as a Contamination Cue, *Journal of Marketing Research*, vol. 53, no. 1, pp.110–123
- Yang, K. (2010). Determinants of US consumer mobile shopping services adoption: implications for designing mobile shopping services, *Journal of Consumer Marketing*, vol. 27, no. 3, pp.262–270
- Yoon, N., Lee, H., & Choo, H. (2020). Fast Fashion Avoidance Beliefs and Anti-Consumption Behaviors: The Cases of Korea and Spain, *Sustainability*, vol. 12, no. 17
- Yu, T.-W., & Chen, T.-J. (2018). Online Travel Insurance Purchase Intention: A Transaction Cost Perspective, *Journal of Travel & Tourism Marketing*, vol. 35, no. 9, pp.1175–1186

Yurk, V. (2020). What can you do to fight the climate crisis?, The Guardian, Available online: <https://www.theguardian.com/us-news/2020/aug/04/what-can-you-do-to-fight-the-climate-crisis> [Accessed 6 April 2021]

Zamani, B., Sandin, G., & Peters, G. M. (2017). Life Cycle Assessment of Clothing Libraries: Can Collaborative Consumption Reduce the Environmental Impact of Fast Fashion?, *Journal of Cleaner Production*, vol. 162, pp.1368–1375

# Appendix A

## Appendix A.1: Questionnaire Design

Dear participant,

Thank you for agreeing to take part in this study - it means a lot to us!

We are Julia and Dana, two Master's students (MSc) from the International Marketing & Brand Management program at Lund University, Sweden.

As part of our Master Thesis, we are looking into fast fashion rental services and the drivers behind their adoption. The following questionnaire will take approximately 10 minutes to complete.

We would also like to inform you that this survey is conducted according to the GDPR guidelines. Participation is anonymous and voluntary. You have the right to exit the study at any point if you wish to cancel your participation. Your responses will remain confidential, and the data will only be used for research purposes. By continuing, you accept these terms and conditions and give consent to participate in this study.

At the end of this survey, you are more than welcome to leave your e-mail address for a chance to win one of three Amazon gift cards, one for 100 SEK or two for 50 SEK (10€ or 2 x 5€). We will choose three respondents randomly and will contact them in approximately two weeks.

If you have any questions or thoughts, please feel free to contact us:

Julia Lagler: ju6451la-s@student.lu.se

Dana Kamand: da2882ka-s@student.lu.se

Thank you in advance, we really appreciate your support!

Best regards,

Julia & Dana

### Demographics

1. What is your gender?
  - Male
  - Female
  - Nonbinary
  - Other
  - I prefer not to say
2. How old are you? (open question)
3. What is your nationality? (open question)

4. What is your highest educational level?

- Ph.D.
- Diploma
- Master
- Bachelor
- College
- Highschool
- None

5. What is your current occupation?

- Student
- Part-time employed
- Full-time employed
- Self-employed
- Non employed
- Currently looking for a job
- Other
- Prefer not to say

**Relevant Background Information:**

Fashion rental services fall within the scope of access-based collaborative consumption whereby consumers have the chance to use a fashion item, for a certain period of time and in exchange for a fixed amount of money, without owning it. Moreover, fashion rental services are primarily held through digital platforms and can take one of two forms: **Business-to-consumer (B2C)** and **Peer-to-peer (P2P)**.

In **B2C platforms**, the company owns both the digital platform and clothes that consumers rent out. In other words, consumers rent from the company on a company-owned platform.

In **P2P platforms**, the company provides only the platform and consumers rent out clothes from one another. As a result, consumers in a P2P platform can take up two roles: a **user** (who rents out others' clothes) and an **asset provider** (who leases out their own clothes). A consumer can choose to rent, lease or do both on a P2P platform.

Furthermore, the scope of this study will be on the P2P platforms, specifically in the fast fashion segment. Examples of fast fashion include H&M and Zara.

Please rate how much you agree with the following statements (1= strongly disagree; 7=strongly agree).

If you have not used P2P fast fashion rental services before, we kindly ask you to provide us with your perceptions in the following questions.

### **Environmental Sustainability**

6. Fast fashion rental services help to save natural resources.
7. Fast fashion rental services are a sustainable mode of consumption.
8. Fast fashion rental services are ecological.
9. Fast fashion rental services are environmentally friendly.

### **Hedonic Motivation**

10. Using fast fashion rental services is fun.
11. Using fast fashion rental service is enjoyable.
12. Using fast fashion rental service is very entertaining.

### **Price Value**

13. Fast fashion rental services are reasonably priced.
14. Fast fashion rental services are a good value for the money.
15. At the current price fast fashion rental services provide a good value.
16. I can save money by using fast fashion rental services.

### **Performance Expectancy**

17. I find fast fashion rental services useful in my daily life.
18. Using fast fashion rental services help me accomplish things more quickly.
19. Using fast fashion rental services increases my productivity.
20. I think fast fashion rental services is valuable to me.

### **Effort Expectancy**

21. I would find it easy to get the fast fashion rental service platform to do what I want it to do.
22. My interaction with the fast fashion rental service platform would be clear and understandable.
23. Interacting with the fast fashion rental service platform does not require a lot of my mental effort.
24. I would find the fast fashion rental service platform easy to use.

### **Social Influence**

25. People who are important to me think I should use fast fashion rental services.
26. People who influence my behavior think I should use fast fashion rental services.
27. People whose opinions I value prefer that I use fast fashion rental services.
28. Friend's, suggestion and recommendation will affect my decision to use fast fashion rental services.

### **Perceived Hygiene Risk**

- 29. Rented clothes are as hygienic as new clothes.
- 30. I do not associate adjectives such as "dirty" and "smelly" to rented clothes.
- 31. There is not a possibility of contagion through fast fashion rental services.
- 32. I am not worried about the cleanness of rented clothing.

### **Perceived Loss of Ownership Risk**

- 33. Owning my clothing items (instead of renting them) is important to me.
- 34. Having ownership of my clothing items (instead of renting them) gives me comfort, because I have access to those items.
- 35. The clothing items I own reflect the real me.
- 36. I derive some of my identity from the clothing items I own.

### **Adoption Intention**

- 37. The likelihood that I would use fast fashion rental services is high.
- 38. I would be willing to use fast fashion rental services.
- 39. I intend to use fast fashion rental service platforms during the next 12 months.

Thank you so much for your participation!

Please fill in your e-mail address for a chance to win one of three Amazon gift cards! (open text field)

# Appendix A.2: Questionnaire Distribution

## LinkedIn Posts:

 **Dana Kamand** · 1st  
MSc. International Marketing & Brand Management at Lund University | Te...  
3d · 🌐

Renting is the new big thing, but can it work in the affordable and ever-changing fast fashion segment?

My thesis partner [Julia Anna Lagler](#) and I are interested in learning more about this topic and have therefore made Fashion Rental Services (FRS) in the fast fashion segment the topic of our Master Thesis.

We've created a survey to collect consumer perceptions of FRS and would highly appreciate if you fill it out.

Thanks in advance and we look forward to sharing our findings with you!

 **Julia Anna Lagler**  
MSc International Marketing and Brand Management Student at Lund Uni...  
3d · 🌐

Why buy when you can rent? 😊

As sustainable consumption is a rising trend, it presents itself as an interesting topic to research. That being the case, my thesis partner [Dana Kamand](#) and I are conducting a survey for our Master Thesis at Lund University (Sweden) looking into Fast Fashion Rental Services and their adoption intention drivers.

We would highly appreciate if you could take some time (10 minutes maximum) to fill in this survey and get the chance to win 1 out of 3 Amazon gift vouchers plus the satisfaction of knowing you helped someone graduate. 🙏🎓

<https://lnkd.in/epvqPvc>

Thank you so much for helping in advance, we appreciate your help a lot! 🙏

## Reddit Group Post:

↑  r/SampleSize · Posted by u/dana\_kamand 2 hours ago

2  
↓

### [Academic] Master Thesis: Fast Fashion Rental Services (Everyone)

Hello everyone,

My name is Dana Kamand. My thesis partner and I are conducting a survey for our Master Thesis at Lund University looking into Fast Fashion Rental Services and their adoption intention drivers.

We would highly appreciate if you could take some time (10 minutes maximum) to fill in this survey and get the chance to win 1 out of 3 Amazon gift vouchers plus the satisfaction of knowing you helped someone graduate.

[https://campus.lamapoll.de/Final\\_Master\\_Thesis\\_Survey/](https://campus.lamapoll.de/Final_Master_Thesis_Survey/)

And please spread it in your networks.  
Thank you so much for your help!

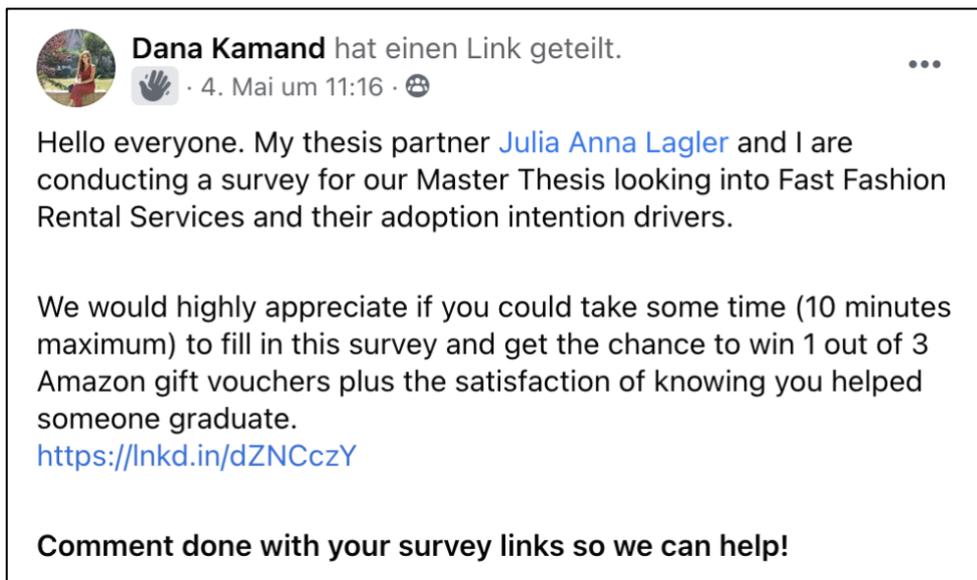
1 Comment   Award   Share   Save   Hide   Report   100% Upvoted

 **r/SampleSize**  
A place for both surveys and polls to be posted. Research studies for school purposes are welcome just as much as opinion polls that just popped into your head. We are also a place for people who enjoy responding to surveys to gather and help people obtain responses for their research. Questions about a mild level of statistics or wording of surveys are also permitted. Come check us out!  
**164k** Participants   **217** Taking surveys now  
Created 21 Feb 2012

## Instagram Stories:



## Facebook “The Research Survey Exchange” Group Post:



## Facebook “The Research Survey Exchange” Group Interaction:

\*COMMENT YOUR SURVEY DOWN BELOW\*

Hi everyone!! My name is [REDACTED] and I'm doing my Master Thesis research on advertisements at Rotterdam School of Management. Anybody is welcome!! Please help me graduate by filling in my survey, which will take approx 9-10 mins of your time:  
<https://erasmusuniversity.eu.qualtrics.com/.../SV...>  
Your help is much appreciated. Comment your surveys (no matter how long) so I could return the favor!!

ERASMUSUNIVERSITY.EU.QUALTRICS.COM  
**Online Survey Software | Qualtrics Survey Solutions**

1 10 Kommentare

 Gefällt mir  Kommentieren

Neueste zuerst ▼

 Kommentieren ...    

 **Dana Kamand** 🙋  
Hello I finished yours, can you help out with ours?  
[https://campus.lamapoll.de/Final\\_Master\\_Thesis\\_Survey/](https://campus.lamapoll.de/Final_Master_Thesis_Survey/)

 **CAMPUS.LAMAPOLL.DE**  
Master Thesis Study: Fast Fashion Rental Services (LamaPoll - Online...)

## Appendix A.3: Operationalisation of the Variables

Constructs and items	Item wording	Adapted from	$\alpha$	$\lambda$
Behavioural Intention (BI)			.905	
BI1	The likelihood that I would use fast fashion rental services is high.	Baek & Oh, 2021	.825	.939
BI2	I would be willing to use fast fashion rental services.		.885	.905
BI3	I intend to use fast fashion rental service platforms during the next 12 months.	Lang et al., 2019	.879	.910
Environmental Sustainability (ES)			.892	
ES1	Fast fashion rental services help to save natural resources.	Hamari et al., 2016	.877	.839
ES2	Fast fashion rental services is a sustainable mode of consumption.		.855	.879
ES3	Fast fashion rental services is ecological.		.859	.873
ES4	Fast fashion rental services are environmentally friendly.		.852	.885
Hedonic Motivation (HM)			.884	
HM1	Using fast fashion rental services is fun.	Venkatesh et al., 2012	.845	.897
HM2	Using fast fashion rental service is enjoyable.		.806	.919
HM3	Using fast fashion rental service is very entertaining.		.857	.889
Price Value (PV)			.810	
PV1	Fast fashion rental services are reasonably priced.		.734	.864
PV2	Fast fashion rental services are a good value for the money.		.709	.873
PV3	I can save money by using fast fashion rental services.	Singh & Matsui, 2017	.785	.836
Performance Expectancy (PE)			.908	
PE1	I find fast fashion rental services useful in my daily life.	Venkatesh et al., 2012	.880	.887
PE2	Using fast fashion rental services helps me accomplish things more quickly.		.866	.911
PE3	Using fast fashion rental services increases my productivity.		.880	.886
PE4	I think fast fashion rental services is valuable to me.	Pascual-Miguel et al., 2015	.896	.857

Effort Expectancy (EE)			.843	
EE1	I would find it easy to get the fast fashion rental service platform to do what I want it to do.		.793	.841
EE2	My interaction with the fast fashion rental service platform would be clear and understandable.		.782	.856
EE3	Interacting with the fast fashion rental service platform does not require a lot of my mental effort.		.829	.782
EE4	I would find the fast fashion rental service platform easy to use.		.800	.826
Social Influence (SI)			.874	
SI1	People who are important to me think I should use fast fashion rental services.	Venkatesh et al., 2012	.821	.891
SI2	People who influence my behavior think I should use fast fashion rental services.		.797	.925
SI3	People whose opinions I value prefer that I use fast fashion rental services.		.793	.929
SI4	Friend's, suggestion and recommendation will affect my decision to use fast fashion rental services.	Kaur et al., 2020	.925	.654
Hygiene Risk (HR)*			.862	
HR1	Rented clothes are as hygienic as new clothes.	Silva et al., 2021	.815	.858
HR2	I do not associate adjectives such as "dirty" and "smelly" to rented clothes.		.821	.846
HR3	There is not a possibility of contagion through fast fashion rental services.		.832	.826
HR4	I am not worried about the cleanness of rented clothing.	Lang et al., 2019	.828	.837
Loss of Ownership (LO)			.816	
LO1	Owning my clothing items (instead of renting them) is important to me.	Park & Armstrong, 2019b	.771	.799
LO2	Having ownership of my clothing items (instead of renting them) gives me comfort, because I have access to those items.		.757	.820
LO3	The clothing items I own reflect the real me.		.763	.812
LO4	I derive some of my identity from the clothing items I own.		.783	.779

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\*Transformed variable

# Appendix B

## Appendix B.1: Socio-Demographics

	Mean									Total	
	ES	HM	PV	PE	EE	SI	HR*	LO	BI	(no. respondents)	(%)
<i>Sample Allocation</i>											
Sample Size	362	362	362	362	362	362	362	362	362	362	100%
<i>Demographics</i>											
<i>Gender</i>											
Female	4.9532	4.7447	4.6411	4.0904	4.7223	4.0138	4.3713	4.9234	4.4099	235	64.9
Male	5.0533	4.5164	4.8005	4.3627	4.8545	4.1906	4.2541	4.8361	4.4208	122	33.7
Nonbinary	4.0833	2.1111	2.5556	2.0000	3.5000	2.0833	3.5000	3.5000	1.8889	3	.8
I prefer not to say	4.9765	4.6409	4.1667	4.1609	4.6250	3.7500	4.3750	5.3750	3.5000	2	.6
<i>Age</i>											
18-24	4.9353	4.4000	4.4510	3.8853	4.5176	3.8971	4.0412	4.9912	4.1569	85	23.5
25-34	4.9850	4.6937	4.7464	4.2810	4.8515	4.1592	4.2927	4.9487	4.4188	234	64.6
35-44	5.0441	4.9314	4.9412	4.3015	4.7721	3.8676	5.0000	4.5294	4.9118	34	9.4
45+	4.8889	4.4444	3.9259	3.1111	4.4722	3.5833	5.2778	3.5556	3.7778	9	2.5
<i>Region</i>											
Europe	4.8985	4.4752	4.5413	3.8243	4.6436	3.7884	4.3168	4.7450	4.1469	202	55.8
North America	5.0901	4.9159	4.8559	4.7658	5.0000	4.6644	4.6329	5.0068	4.9099	111	30.7
Asia	5.1859	4.6496	4.8376	4.3462	4.7756	3.8462	3.7436	5.2115	4.2051	39	10.8
Others	4.9765	4.6409	4.6750	4.1609	4.7562	4.0559	4.3246	4.8847	4.3877	10	2.8
<i>Education</i>											
Ph.D.	4.8106	4.8687	4.7071	4.6970	4.8788	4.5379	4.4621	4.6364	4.6061	33	9.1
Diploma	4.4000	4.7556	4.6444	3.9333	4.6333	3.6500	3.9833	4.5333	4.1333	15	4.1
Master	4.7000	4.3020	4.3098	3.4824	4.5029	3.3471	4.1853	4.8294	3.8196	85	23.5
Bachelor	4.9473	4.5573	4.6979	4.0723	4.6406	4.0469	4.2500	4.9824	4.3594	128	35.4

College	5.4329	5.0366	5.0528	4.8811	5.1524	4.7043	4.6189	4.8659	5.1057	82	22.7
Highschool	5.2500	4.4510	4.5490	4.0147	4.8382	3.9559	4.3382	5.2353	3.8627	17	4.7
None	4.6250	5.1667	4.0000	3.2500	4.8750	4.1250	3.1250	5.5000	3.6667	2	.6
<hr/>											
<i>Occupation</i>											
Student	4.7525	4.1833	4.3767	3.4750	4.4750	3.3825	4.0400	5.1500	3.7633	100	27.6
Part-time employed	4.8141	4.7778	4.5214	4.2756	4.7756	4.4103	4.5321	5.0385	4.5641	39	10.8
Full-time employed	5.0771	4.8267	4.8381	4.3829	4.8414	4.2243	4.4429	4.7243	4.5448	175	48.3
Self-employed	5.5093	4.9012	5.0617	4.9167	5.1389	4.6759	4.4907	5.0741	5.1852	27	7.5
Non employed	5.2083	4.9444	4.6667	5.0833	5.1667	4.4583	3.8750	4.2917	4.7778	6	1.7
Currently looking for a job	4.7778	5.1852	5.0000	4.8889	5.0278	4.7778	4.1389	4.3889	5.0000	9	2.5
Other	4.5000	3.6667	3.6667	2.9583	4.2917	3.7917	4.2500	4.6250	4.1667	6	1.7

\*Transformed Variable

## Appendix B.2: Correlation Analysis

	ES	HM	PV	PE	EE	SI	HR****	LOR
ES								
HM	.443**							
PV	.492**	.452**						
PE	.442**	.612**	.633**					
EE	.449**	.527**	.523**	.593**				
SI	.396**	.535**	.581**	.726**	.499**			
HR	-.185**	-.361**	-.269**	-.319**	-.312**	-.302**		
LO	.088	-.004	.087	.030	.101	.074	-.127*	

\*\* Correlation is significant at the 0.01 level (2-tailed) \* Correlation is significant at the 0.05 level (2-tailed) N=362. ES=Environmental Sustainability, HM=Hedonic Motivation, PV=Price Value, PE=Performance Expectancy, EE=Effort Expectancy, SI=Social Influence, HR= Hygiene Risk, LO=Loss of Ownership Risk \*\*\*\*Transformed Variable

## Appendix B.3: Regression Analysis

### Model Summary<sup>b</sup>

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.818 <sup>a</sup>	.670	.662	2.80498

- a. Predictors: (Constant), LO\_Mean Loss of Ownership Risk, HM\_Mean Hedonic Motivation, HR\_Mean Hygiene Risk, ES\_Mean Environmental Sustainability, PV\_Mean Price Value, EE\_Mean Effort Expectancy, SI\_Mean Social Influence, PE\_Mean Performance Expectancy
- b. Dependent Variable: BI\_Mean Behavioural Intention

### ANOVA<sup>a</sup>

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	5628.011	8	703.501	89.414	.000 <sup>b</sup>
	Residual	2777.373	353	7.868		
	Total	8405.384	361			

- a. Dependent Variable: BI\_Mean Behavioural Intention
- b. Predictors: (Constant), LO\_Mean Loss of Ownership Risk, HM\_Mean Hedonic Motivation, HR\_Mean Hygiene Risk, ES\_Mean Environmental Sustainability, PV\_Mean Price Value, EE\_Mean Effort Expectancy, SI\_Mean Social Influence, PE\_Mean Performance Expectancy

### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations			Collinearity Statistics	
		B	Std. Error	Beta			Zero-order	Partial	Part	Tolerance	VIF
1	(Constant)	3.050	1.236		2.467	.014					
	ES_Mean Environmental Sustainability	.367	.156	.089	2.348	.019	.490	.124	.072	.647	1.547
	HM_Mean Hedonic Motivation	.368	.167	.093	2.209	.028	.592	.117	.068	.530	1.888
	PV_Mean Price Value	.050	.189	.011	.267	.789	.551	.014	.008	.511	1.956
	PE_Mean Performance Expectancy	1.367	.174	.407	7.878	.000	.754	.387	.241	.351	2.849
	EE_Mean Effort Expectancy	.106	.200	.022	.529	.597	.523	.028	.016	.565	1.770
	SI_Mean Social Influence	.925	.163	.260	5.664	.000	.694	.289	.173	.443	2.259
	HR_Mean Hygiene Risk	-.515	.124	-.144	-4.153	.000	-.415	-.216	-.127	.779	1.284

LO_Mean Loss of Ownership	-0.88	.034	-0.81	-2.566	.011	-0.73	-.135	-.079	.932	1.073
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a. Dependent Variable: BI\_Mean Behavioural Intention

### Collinearity Diagnostics<sup>a</sup>

Model	Dimensions	Eigenvalue	Condition Index	Variance Proportions								
				(Constant)	ES_Mean	HM_Mean	PV_Mean	PE_Mean	EE_Mean	SI_Mean	HR_Mean	LO_Mean
1	1	8.574	1.000	.00	.00	.00	.00	.00	.00	.00	.00	.00
	2	.211	6.380	.00	.00	.01	.00	.02	.00	.02	.26	.02
	3	.056	12.382	.01	.02	.03	.00	.11	.02	.17	.37	.18
	4	.042	14.343	.00	.13	.08	.01	.00	.00	.21	.06	.53
	5	.033	16.140	.00	.33	.42	.14	.07	.01	.03	.04	.00
	6	.028	17.391	.00	.04	.14	.09	.50	.02	.53	.00	.02
	7	.025	18.505	.03	.39	.02	.18	.18	.23	.03	.00	.14
	8	.020	20.566	.00	.08	.20	.51	.02	.47	.01	.00	.03
	9	.011	27.793	.95	.01	.10	.07	.11	.24	.00	.26	.08

a. Dependent Variable: BI\_Mean Behavioural Intention

