THE INFINITE WARDROBE: FEMALE CONSUMERS’ VALUE PERCEPTIONS REGARDING COLLABORATIVE CONSUMPTION OF APPAREL

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Abstract

Understanding the potential factors and underlying mechanisms to engage in collaborative consumption practices has become a significant concern for academics and practitioners. However, collaborative consumption research is still considered in its early stage; thus, further research is needed. Based on this need, this study extends existing research by providing empirical support for the importance of value perceptions and empathy on female consumers’ attitudes and behavioral intentions to engage in collaborative consumption in the apparel industry. This study also shows a significant moderating effect for materialism and the need for uniqueness in the collaborative consumption of apparel. These findings are believed to be particularly valuable in contributing to the broader literature on collaborative consumption and guiding, especially practitioners, to develop strategic tactics for motivating consumers to engage in collaborative consumption practices.

Keywords: Collaborative consumption, value, empathy, materialism, need for uniqueness, apparel

JEL classification: M00, M31

1. Introduction

Since the early days of marketing thought, the notion of exchange has been considered as one of its cornerstones (Bagozzi 1975). However, especially in the last decade, a new form of exchange has gained momentum, and collaborative consumption has been introduced as an alternative to traditional ownership-based consumption (Akbar 2019). Powered by the advances in the information technology that enable consumers to connect with other consumers through various online platforms (Hamari, Sjöklint, and Ukkonen 2016; Kim and Jin 2020), this new form of collaborative exchange has offered consumers the chance to have access to a wide range of goods and services without the need for purchase or ownership (Hwang and Griffiths 2017). Even if some of the well-known collaborative platforms were started earlier (e.g., Airbnb in 2008), such platforms have become a...
global trend, especially after May 2010. It was when Rachel Botsman, in a TEDx talk, introduced the notion of collaborative consumption as an emerging economic and cultural force that would reinvent the idea of consumption (Herbert and Collin-Lachaud 2017; Parguel, Lunardo, and Benoit-Moreau 2017).

Collaborative consumption has turned out to be a vital element of the global economy. Thus, understanding the potential factors and underlying mechanisms to engage in collaborative consumption practices rather than prefer traditional ownership models has become a significant concern for both academics and practitioners (Bucher, Fieseler, and Lutz 2016; Benoit et al. 2017; Milanova and Maas 2017; Park and Armstrong 2019a). Accordingly, there has been an exponential growth in the number of studies conducted in this stream of research (Hossain 2020). However, these studies have mostly been conceptual or qualitative, and the studies that empirically investigate the factors influential on consumers’ attitudes toward and participation in such collaborative practices have been somewhat limited in number (Lee et al. 2018; Zhang et al. 2019). Realizing this gap in the extant literature, some researchers have recently diverted their interest to empirically testing different types of value perceptions as potential drivers for engaging in collaborative consumption (Hwang and Griffiths 2017; Činjarević, Kožo, and Berberović 2019). However, collaborative consumption research is still considered in its early stage (Lee et al. 2018; Iran, Geiger, and Schrader 2019); thus, further research is needed. It is also important to note that the recent Covid-19 pandemic has radically affected the collaborative consumption dynamics and had an economically devastating effect on many collaborative consumption firms and platforms (Dolnicar and Zare 2020; Batool et al. 2021; Degli Esposti, Mortara, and Roberti 2021). Still, it is argued that the Covid-19 pandemic might indeed be an opportunity for the collaborative consumption industry to recalibrate (Hossain 2021) and return to its original nature that focuses on experiences and values (Zhang et al. 2021).

Based on this need for further research, this study aims to extend existing research in various ways. First of all, by testing the effects of three types of value perceptions—utilitarian, hedonic and symbolic—on consumers’ attitudes toward collaborative consumption and their behavioral intentions to engage in such practices, this study provides further empirical support for the importance of value perceptions in the context of collaborative consumption. Second, as Hwang and Griffiths (2017) emphasized, this study incorporates empathy as an important emotional factor to fully understand consumers’ attitudes and behavioral intentions toward collaborative consumption. Third, since it is not possible to generalize the findings on consumers’ value perceptions, given that the influence of value perceptions may change depending on the industry/context (Park and Armstrong 2017), this study focuses on the collaborative consumption practices in the apparel industry. These practices have recently gained popularity, especially among female consumers. Even if the research on collaborative consumption of apparel is still limited, it appears as a promising research area. Through these practices, consumers may have access to an infinite wardrobe full of various new and unique fashion products that would otherwise be inaccessible for them (Balck and Cracau 2015; Lang and Armstrong 2018). Female consumers are specifically chosen as suitable respondents for this study as female consumers are commonly believed to be more involved in fashion products (Lang and Armstrong 2018) and sometimes even considered the over-consumers of fashion (McNeill and Venter 2019). Finally, this study introduces two personality traits—materialism and the need for uniqueness—as boundary conditions and examines whether and how these traits moderate female consumers’ responses to collaborative consumption of apparel. Even if there exist some studies that generally investigate the impact of materialism and the need for uniqueness in the context of collaborative consumption (Akbar, Mai, and Hoffmann 2016; Lang and Armstrong 2018; Lindblom, Lindblom, and Wechtler 2018), these studies seem to be still limited in number. Moreover, in these studies, mainly the direct effects of these personality traits on consumers’ attitudes toward collaborative consumption and behavioral intentions to engage in such practices are tested, and conflicting findings have been reported. Thus, the findings on the effect of these personality traits are believed to be particularly valuable in contributing to the broader literature on collaborative consumption and guiding, especially practitioners, to develop strategic tactics for motivating consumers to engage in collaborative consumption.

2. Theoretical background and hypotheses

2.1. Collaborative consumption

The notion of collaborative consumption has received increasing emphasis in academia through the years. However, despite its popularity as a fertile area of research, the literature is still limited and highly fragmented due to a lack of clarity about the definition and scope of collaborative consumption (Barbosa and
In their landmark book on collaborative consumption, Botsman and Rogers (2010) define collaborative consumption in a way to include a broad range of traditional market activities such as “traditional sharing, bartering, lending, trading, renting, gifting and swapping” (p. xv). However, in his highly cited study on collaborative consumption, Belk (2014) criticizes the definition provided by Botsman and Rogers (2010) for being “too broad and mixes marketplace exchange, gift-giving and sharing” and define collaborative consumption as “people coordinating the acquisition and distribution of a resource for a fee or other compensation” (p. 1597). In response, other studies propose their definition of the concept (Barnes and Mattsson 2016; Hamari, Sjöklint, and Ukkonen 2016). This diversity of definitions also makes it harder to establish clear boundaries between the concepts; thus, various related concepts such as “collaborative consumption” (Botsman and Rogers 2010; Möhlmann 2015), “sharing” (Belk 2014), “access-based consumption” (Bardhi and Eckhardt 2012; Lawson et al. 2016), “commercial sharing systems” (Lamberton and Rose 2012) or “sharing economy” (Hamari, Sjöklint, and Ukkonen 2016) are used interchangeably in the literature while referring to closely related and sometimes even the same practices. Still, collaborative consumption is the one that is widely used among all these (Ianole-Călin, Francioni, Masili, Druică, and Goschin 2020).

Many believe that the recent economic crisis and the financial problems that follow have significantly contributed to collaborative consumption as a viable alternative that challenges the traditional economy (Abbes, Hallem, and Taga 2020). One of the most important benefits of collaborative consumption is related to cost savings (Činjarević, Kožo, and Bergerović 2019), and it is not surprising that many consumers who cannot afford to buy and own products opt to collaborate with others (Barbosa and Fonseca 2019). Also, the potential social benefits associated with collaborative consumption are quite influential in terms of increasing its popularity. Nowadays, consumers are more sensitive toward the environmental and societal problems such as hyper-consumption, resource depletion, pollution and social alienation, and they consider collaborative consumption as a new socioeconomic model that may alleviate these problems to some extent (Botsman and Rogers 2010; Prothero et al. 2011; Hamari, Sjöklint, and Ukkonen 2016; Roos and Hahn 2019). Still, these are not the only factors that motivate consumers toward collaborative consumption. Collaborative consumption is undeniably facilitated by the rapid advances in information and communication technologies, especially mobile technologies, and the increasing consumer trust in e-commerce and online payments (Altinay and Taheri 2019). The various online platforms that act as digital intermediaries not only enable consumers to easily connect and share their underutilized assets such as goods and services but also significantly decrease the transaction costs of matching suppliers with those consumers (Edbring, Lehner, and Mont 2016; Armstrong and Park 2017; Benoit et al. 2017; Lee 2020).

These developments have contributed to collaborative consumption's growth in scale and scope, especially over the last decade (Böcker and Meelen 2017). During this time, various collaborative consumption platforms such as Airbnb, Uber and Blablacar have set themselves as successful examples for this new form of consumption and gained popularity among consumers (Martin 2016; Hallem, Ben Arfi, and Teulon 2020). Today it is no longer possible to regard collaborative consumption as a niche trend, given that millions of collaborative consumers exist, with some even not being aware that they are a part of this collaborative community, and famous examples of this fast-growing trend are prevalent, with Airbnb getting bookings almost every two seconds on a single day (Zalega 2018). The current situation proves that Time magazine was right when they claimed in 2011 that collaborative consumption would be one of the ten ideas to change the world (Kim and Jin 2020). Since then, investors have considered collaborative consumption as the new “mega trend” and invested lots of money in these collaborative start-ups (Vella 2012; Hamari, Sjöklint, and Ukkonen 2016; Johnson, Mun, and Chae 2016). It is estimated that the collaborative consumption market will have a volume of more than $335 billion by 2025 (PwC 2015).

Unfortunately, collaborative consumption practices have generally been hit hard by the Covid-19 pandemic as consumers have become highly reluctant to share anything like goods, services, or spaces with others due to the fear and anxiety they feel because of the virus (Hossain 2021; Zhu and Liu 2021). Thus, many collaborative consumption platforms have started experiencing severe economic problems with the outbreak of the pandemic. The accommodation and transportation industries are the two industries particularly affected by Covid-19 (Hossain 2021). For example, Airbnb and Uber have faced a significant decline in their bookings, and both their revenues and share prices have fallen drastically (Farmaki et al. 2020; Batool et al. 2021; Zhu and Liu 2021). Thus, these companies have been forced to take measures such as new cleaning protocols requiring a specific waiting time between the bookings and special antivirus cleaning products (Farmaki et al. 2020). On the
contrary, it is interesting that the Covid-19 pandemic has affected some industries favorably, such that bike-sharing has become a virus-free and thus safer alternative to car sharing (Degli Esposti, Mortara and Roberti 2021; Zhu and Liu 2021). Also, there has been an increase in demand for collaborative consumption platforms associated with food delivery and entertainment services (Batool et al. 2021; Hossain 2021).

2.2. Collaborative consumption in the apparel industry

Until now, collaborative consumption has been studied across different contexts such as transportation (Bardhi and Eckhardt 2012), accommodation (Cheng and Foley 2018) and toys (Ozanne and Ballantine 2010). However, academic research on collaborative consumption in the apparel context has been relatively limited, parallel to its rather slow adoption in practice (Pedersen and Netter 2015; Park and Armstrong 2017; Pantano and Styllos 2020). Consumers’ reluctance to adopt collaborative consumption practices in the apparel context is partly due to the hedonic nature of apparel and might be explained based on the endowment effect (Henninger et al. 2021). The endowment effect argues that, especially in hedonic goods, the sense of possessing a good enhances its attractiveness, and as once possessed, it becomes associated with this person’s self (Dommer and Swaminathan 2013; Park and Armstrong 2019b). Apparels are often used for self-enhancement, and for consumers, it is crucial to have such a solid and self-enhancing bond between the apparel they possess and their self-identity (Park and Armstrong 2019b). Yet, as there is no ownership in collaborative consumption practices, this self-enhancing bond between the person and the possession is not realized. In this respect, the endowment effect might act as a potential barrier for collaborative consumption, explaining consumers’ reluctance to adopt collaborative consumption practices in the apparel industry (Park and Armstrong 2019b).

Recently, there has been a significant upsurge of interest in the collaborative consumption of apparel among researchers and consumers (Becker-Leihhold 2018; Iran, Geiger, and Schrader 2019; Park and Armstrong 2019a). The underlying factors contributing to this interest are mainly related to the fast-paced apparel consumption that necessitates a continuous investment of money in apparel purchases and the difficulties faced by the recent economic crises (Pantano and Styllos 2020). One key benefit of collaborative consumption is that consumers have access to an infinite wardrobe of apparel that would otherwise be impossible for them to afford and thus, save money (Lang and Armstrong 2018; Park and Armstrong 2019a). The accelerated pace of apparel consumption also creates a growing concern for sustainability as both the throwaway culture and the over-consumption have a detrimental effect on the natural environment through increased textile waste (Lang and Armstrong 2018; McNeill and Venter 2019; Pena-Vinces, Solakis, and Guillen 2020). With the piles of discarded clothes ending up in landfills, the apparel industry is the second industry that pollutes the environment the most (Henninger, Bürklin, and Niinimaki 2019). Thus, collaborative apparel consumption is highly valued as a sustainability-oriented business model among retailers and consumers (Pena-Vinces, Solakis, and Guillen 2020).

Collaborative apparel consumption is not a new-born trend as people have been sharing their apparel among their friends and family members for many years (Johnson, Mun, and Chae 2016). Yet, the advances in internet technology accompanied by the creation of online platforms that enable consumers to connect with others easily have given the consumers the chance to share their apparel with other people or even companies (Iran and Schrader 2017; Pena-Vinces, Solakis, and Guillen 2020). Today collaborative consumption of apparel takes two distinct forms, and apparel might be sold or exchanged via rental service platforms (e.g., Rent the Runway) or peer-to-peer platforms (e.g., Poshmark) (Jin and Shin 2020; Kim and Jin 2020). These collaborative consumption forms are quite popular, especially among female consumers. Female consumers’ interest in apparel sharing is not surprising given that female consumers are very much involved with fashion, and sometimes they are even considered over-consumers (McNeill and Venter 2019). Nevertheless, it is also possible to explain this interest of female consumers based on their increasing concerns regarding the environment and the benefits collaborative consumption offers in this respect. In the extant literature on collaborative consumption, there exist studies highlighting the need to focus on possible gender differences (del Mar Alonso-Almeida 2019). These studies argue that women generally show a higher environmental motivation for engaging in collaborative consumption than men (Böcker and Meelen 2017).

It is true that with the outbreak of the Covid-19 pandemic, especially the demand for fashion rental services, as a form of collaborative consumption, has decreased significantly due to the rising hygiene and contamination concerns among consumers (Kim and Jin 2021). Even the idea of using apparel that was previously touched by others is very annoying for many
people since it carries a high risk of contamination despite careful product cleaning (Baek and Oh 2021). Thus, nowadays, consumers might be more reluctant to engage in collaborative apparel consumption. However, some fashion companies have already started offering attractive solutions to overcome the problems associated with the pandemic and increase the demand for collaborative apparel consumption in the next forecast period (Future Marketing Insights 2021). Besides, when the economic effects of the Covid-19 pandemic on consumers’ lives are considered, it is argued that more consumers will engage in such collaborative consumption practices (Zhu and Liu 2021). According to a recent market research report, the market valuation for the global online clothing rental market in 2021 is around 1.9 billion US dollars, and the market is expected to grow further during the forecasted period of 2021-2031 with a compound annual growth rate of 11% (Future Marketing Insights 2021).

2.3. Values and collaborative consumption

Developing a better understanding of the drivers for adopting collaborative consumption is crucial for the success of these practices. Thus, this has been an issue of significant interest for researchers (Lindblom, Lindblom, and Wechtler 2018). Within this context, consumers’ value perceptions have been explicitly studied as they play a crucial role in terms affecting consumers’ attitudes toward collaborative consumption and motivating them to engage in this type of consumption (Bucher, Fieseler, and Lutz 2016; Činjarević, Kožo, and Berberović 2019). Value perceptions are generally classified into three main types: utilitarian, hedonic, and symbolic (Hwang and Griffiths 2017), and these types correspond closely to the motivations identified by the self-determination theory (Deci and Ryan 1985; Deci, Koestner, and Ryan 1999). As an extrinsic motivation, utilitarian value is concerned with the utilitarian benefits of collaborative consumption, which are not limited to but mainly concerned with the utilitarian benefits of collaborative consumption (Hamari, Sjöklint, and Ukkonen 2016; Ianole-Cálín, Francioni, Masili, Druică, and Goschin 2020). On the other hand, both hedonic and symbolic values provide intrinsic motivation for engaging in collaborative consumption as hedonic value is related to the fun, excitement, and joy experienced during collaborative consumption, while symbolic value is related to altruistic or social benefits based on environmentally friendly and sustainable consumption (Hwang and Griffiths 2017).

Values are essential for marketing literature as values are known to affect consumers’ attitudes and behavior (Vinson, Scott, and Lamont 1977). As Homer and Hahle (1988) proposed in their value-attitude-behavior hierarchy, values affect attitudes, which in turn affect behavior. This hierarchy has been especially referenced in some studies on collaborative consumption to support the expected effect of consumers’ value perceptions on their attitudes toward collaborative consumption (Hwang and Griffiths 2017; Činjarević, Kožo, and Berberović 2019). In the literature, many studies investigate the impact of different value perceptions on the attitudes toward collaborative consumption (Bucher, Fieseler, and Lutz 2016; Hamari, Sjöklint, and Ukkonen 2016; McNeill and Venter 2019). Even if each type of value perceptions’ significance may change depending on the collaborative consumption context and the sample used in that study, utilitarian, hedonic, and symbolic values usually influence consumers’ attitudes toward collaborative consumption.

In most studies, especially the utilitarian value of collaborative consumption in the form of monetary/economic benefits has been highlighted as the most critical determinant of consumers’ attitudes (Barnes and Mattsson 2017; Benoit et al. 2017). Through collaborative consumption, it is possible to have access to goods and services that would otherwise be hard to purchase at a lower price, and such immediate cost-savings motivate consumers toward this type of consumption by positively affecting their attitudes (Roos and Hahn 2019). Although monetary/economic benefits are claimed to be necessary but not sufficient for motivating sharing behavior (Bucher, Fieseler, and Lutz 2016), it is generally agreed that consumers’ utilitarian value perceptions positively affect their attitudes toward collaborative consumption (Hwang and Griffiths 2017). Even if not many studies are conducted in the apparel context, in their recent study, Baek and Oh (2021) investigate how the different values associated with fashion rental services affect attitudes. Their findings reveal that economic value is vital in enhancing consumers’ attitudes toward fashion rental services.

The effect of utilitarian value on behavioral intentions to engage in collaborative consumption practices has also been of interest to researchers. For example, Hallem, Ben Arfi, and Teulon (2020) have conducted interviews with consumers to gain a deeper insight into collaborative consumption and found that it is mainly the economic benefits that motivate consumers to engage in such practices. Other studies also support that the idea of saving money and being able to afford something that would otherwise be unaffordable constitutes a key reason for engaging in collaborative consumption (Hamari, Sjöklint, and Ukkonen 2016; Činjarević, Kožo, and Berberović 2019; Arteaga-Sánchez et al. 2020). The limited research on
collaborative apparel consumption also reveals that saving money is the most frequently cited motivation for engaging in online apparel renting and resale (Park and Armstrong 2019a). Based on these studies, it is hypothesized that:

H1a: Utilitarian value positively influences female consumers’ attitudes toward collaborative consumption of apparel.
H1b: Utilitarian value positively influences female consumers’ behavioral intentions to engage in collaborative consumption of apparel.

Having access to various choices that would generally be harder or sometimes even impossible to afford also provides consumers with the hedonic value associated with feelings of fun, enjoyment and entertainment (Hossain 2020). According to market research conducted by PwC (2015), 63% of consumers think that collaborative consumption is more fun compared to traditional consumption. Apart from any expectations regarding the performance consequences, even the idea of engaging in collaborative consumption is considered enjoyable as it allows consumers to form new social connections (Bucher, Fieseler, and Lutz 2016; Hwang and Griffiths 2017; Lee et al. 2018). Thus, some consumers engage in collaborative consumption just because of the fun and the social interaction opportunities associated with this type of consumption (Hamari, Sjöklint, and Ukkonen 2016). Collaborative consumption also helps consumers satisfy their desire for status by allowing them to “pretend to be someone you are not for a day and do something that you may not otherwise get to do” (Lawson et al. 2016, p. 2616). A careful review of the extant literature reveals that these feelings of fun and enjoyment, associated with hedonic value, play a significant role in positively influencing attitudes and behavioral intentions toward collaborative consumption (Hamari, Sjöklint, and Ukkonen 2016; Hwang and Griffiths 2017; Činjarević, Kožo, and Berberović 2019; Zhang et al. 2019; Minami, Ramos, and Bortoluzzo 2021).

Given the hedonic nature of the apparel industry, it is not surprising that hedonistic aspects drive collaborative apparel consumption (Becker-Leifhold 2018). Collaborative apparel consumption offers consumers the chance to enjoy both the outcome and the process of building an infinite wardrobe full of choices (Becker-Leifhold and Iran 2018) and even experience a “Cinderella moment” (Pantano and Stylos 2020). Taken together, this enjoyment, which is associated with hedonic value, positively influences consumers’ attitudes toward and behavioral intentions to engage in collaborative consumption of apparel. Previous studies in this field reveal that hedonic value generally has one of the strongest influences on consumers’ attitudes and behavioral intentions (Lang, Seo, and Liu 2019; Baek and Oh 2021). Thus, it is hypothesized that:

H2a: Hedonic value positively influences female consumers’ attitudes toward collaborative consumption of apparel.
H2b: Hedonic value positively influences female consumers’ behavioral intentions to engage in collaborative consumption of apparel.

In the context of collaborative consumption, symbolic value is also believed to be very important. As previously stated, symbolic value is associated with altruistic or social benefits based on consumers’ greater concern for the environment and awareness of sustainability issues (Hwang and Griffiths 2017). Every day more people realize that collaborative consumption might be quite environmentally beneficial in terms of promoting the reuse of products, optimizing lifecycles, and reducing environmental waste by decreasing the need for new products (Piscicelli, Cooper, and Fisher 2015; Parguel, Lunardo, and Benoit-Moreau 2017; Lang and Armstrong 2018; Barbosa and Fonseca 2019). As a result, the need to investigate the effect on symbolic value consumers’ attitudes and behavioral intentions toward collaborative consumption has become a priority. Since acting in an environmentally friendly manner and caring about sustainability issues are believed to show one’s prosociality and willingness to bear the costs for others, symbolic value is “positioned as a part of the prosocial movement” (Hwang and Griffiths 2017, p. 135). Nowadays, consumers prefer collaborative consumption platforms to create a sustainable marketplace for current and future generations (Hamari, Sjöklint, and Ukkonen 2016). Along these lines, the effects of environmental benefits and sustainability associated with collaborative consumption on consumers’ attitudes and behavioral intentions are investigated in the extant literature, and the results generally support the positive effect of environmental benefits and sustainability as a strong intrinsic motivation for collaborative consumption (Hamari, Sjöklint, and Ukkonen 2016; Albinsson et al. 2019; Činjarević, Kožo, and Berberović 2019). On the other hand, some studies claim that environmental benefits and sustainability are either not a strong driver for collaborative consumption or do not significantly affect consumers’ attitudes and behavioral intentions (Möhlmann 2015; Habibi, Kim, and Laroche 2016). These conflicting findings might be explained based on contextual differences, as the weight of environmental benefits and sustainability will not be the same for all industries (Minami, Ramos,
and Bortoluzzo 2021). Nevertheless, a review of studies conducted on collaborative consumption within the apparel industry also reveals similarly conflicting findings. While some studies show that environmental benefits and sustainability are considered important drivers for collaborative apparel consumption (Armstrong et al. 2015; Pantano and Stylos 2020), others show that their effect on consumers’ attitudes and behavioral intentions is either limited (Vincent and Gaur 2021) or not significant (Baek and Oh 2021). In the light of these findings in prior research, this study hypothesizes that:

H3a: Symbolic value positively influences female consumers’ attitudes toward collaborative consumption of apparel.
H3b: Symbolic value positively influences female consumers’ behavioral intentions to engage in collaborative consumption of apparel.

2.4. Values and empathy

Another concept that may be very important in collaborative consumption but has not been fully acknowledged is empathy. Briefly defined as “a person's absorption in the feelings of another” (Escalas and Stern 2003, p. 567), empathy is considered a significant factor for explaining prosocial behavior (White, Habib, and Dahl 2020). Empathy makes people adopt others’ perspectives, thus motivating them to take altruistic actions to help those in need (Hwang and Griffiths 2017). The importance of empathy and its relationship with prosocial behavior has been studied for a long time in developmental, social and clinical psychology (Eisenberg and Fabes 1990). However, the critical role it may play in better understanding consumers’ attitudes and behavioral intentions toward collaborative consumption has received only limited attention within the literature on collaborative consumption. To our knowledge, the earliest of these limited attempts is the study by Hwang and Griffiths (2017). In this study, the researchers state that it is possible to consider collaborative consumption practices as a form of prosocial behavior since collaborative consumption is, at the same time, concerned with others’ welfare. Citing the study by Batson et al. (2007) within the field of social psychology, Hwang and Griffiths (2017) argue that utilitarian, hedonic and symbolic values associated with this form of prosocial behavior will increase consumers’ empathy toward collaborative consumption as caring for the welfare of others generates empathic concern. Even if their findings do not provide support for the expected relationship between utilitarian value and empathy, they reveal that hedonic value and symbolic value have a significant effect on empathy toward collaborative consumption practices. Thus, it is hypothesized that:

H4a: Utilitarian value positively influences female consumers’ empathy toward collaborative consumption of apparel.
H4b: Hedonic value positively influences female consumers’ empathy toward collaborative consumption of apparel.
H4c: Symbolic value positively influences female consumers’ empathy toward collaborative consumption of apparel.

2.5. Empathy, attitudes and behavioral intentions

In their study, Hwang and Griffiths (2017) also investigate the effect of empathy on consumers’ attitudes and behavioral intentions toward collaborative consumption. Since the concept of empathy has not been fully acknowledged within the literature on collaborative consumption, the researchers cite other studies conducted in related fields to support their arguments. For example, Escalas and Stern (2003) argue that consumers’ attitudes toward a commercial are very much affected by their empathy toward that commercial. Based on this study, Hwang and Griffiths (2017) hypothesize that consumers who feel empathy toward collaborative consumption are more likely to have a more favorable attitude toward these practices. In a similar vein, the researchers cite some studies from the fields of personality and social psychology (e.g., Mehrabian and Epstein 1972; Davis et al. 1999; Graziano et al. 2007) to support their argument that empathy may serve as an altruistic motivation for behavioral intentions toward collaborative consumption practices. The findings of Hwang and Griffiths (2017) support prior research as the effect of empathy on consumers’ behavioral intentions toward collaborative consumption is found to be significant and positive. Thus, it is hypothesized that:

H5a: Empathy toward collaborative consumption of apparel positively influences female consumers’ attitudes toward collaborative consumption of apparel.
H5b: Empathy toward collaborative consumption of apparel positively influences female consumers’ behavioral intentions to engage in collaborative consumption of apparel.

As in many contexts related to consumer behavior, the relationship between consumers’ attitudes and behavioral intentions toward collaborative consumption
practices has also been studied extensively in this specific research stream (Barnes and Mattsson 2017; Hwang and Griffiths 2017). In these studies, two intertwined theories - the theory of reasoned action (TRA) and the theory of planned behavior (TPB) - are usually drawn upon to theoretically support how attitudes may act as a significant predictor of behavioral intentions. According to the TRA (Ajzen and Fishbein 1980), individuals’ intention to act is determined by two factors, which are attitudes toward behavior and subjective norms. The TPB (Ajzen 1991) is an extension of the TRA in the sense that it introduces perceived behavioral control as an additional third factor that may affect behavioral intentions and subsequently lead to behavior. These two theories have been commonly adopted by prior studies on collaborative consumption to support the relationship between attitudes and behavioral intentions (Hwang and Griffiths 2017; Lindblom, Lindblom, and Wechtler 2018; Činjar, Kožo, and Berberović 2019; Roos and Hahn 2019).

In some studies, the relationship between attitudes and behavioral intentions is found to be weaker than expected (Hamari, Sjöklint, and Ukkonen 2016). Nevertheless, most of the studies conducted in the context of collaborative apparel consumption support that attitudes strongly shape behavioral intentions (Johnson, Mun, and Chae 2016; Becker-Leifhold 2018; Baek and Oh 2021). Thus, it is hypothesized that:

H6: Female consumers’ attitudes toward collaborative consumption of apparel positively influence their behavioral intentions to engage in collaborative consumption of apparel.

2.6. Moderating effect of materialism and need for uniqueness

Consumers’ attitudes toward collaborative consumption and behavioral intentions to engage in such collaborative practices may differ according to consumers’ different personality traits. In the extant literature, a group of studies highlights the critical role that personality traits such as materialism and the need for uniqueness may play in collaborative consumption (Akbar, Mai, and Hoffmann 2016; Davidson, Habibi, and Laroche 2018; Lang and Armstrong 2018; Lindblom, Lindblom, and Wechtler 2018). These studies generally examine these traits as potential drivers that directly affect collaborative consumption attitudes and behavioral intentions; however, there is no consensus in their findings. Thus, as fertile research ground, further studies are highly needed to understand better the role of these personality traits in collaborative consumption. Based on this need, very few attempts highlight some personality traits as boundary conditions and investigate their effect as potential moderators. For example, in their study, Akbar, Mai, and Hoffmann (2016) argue that the desire for unique consumer products may act as a moderator. Their findings reveal that consumers with a strong desire for unique consumer products are more likely to turn their sharing intention into engaging in collaborative consumption practices.

As this study focuses on the collaborative consumption of apparel, it is important to investigate the moderating effect of materialism and the need for uniqueness. A review of the studies on the apparel industry reveals that these two traits are frequently highlighted as important for better understanding consumers’ attitudes and behavioral intentions (Johnson, Mun, and Chae 2016; Lang and Armstrong 2018). Nevertheless, to the best of our knowledge, there exist no studies explicitly investigating the potential moderating effect of materialism and the need for uniqueness in the context of collaborative apparel consumption. Still, the discussion on the characteristics of these traits provides indications that both materialism and need for uniqueness may have a negative effect in the context of collaborative consumption (Akbar, Mai, and Hoffmann 2016; Lang and Armstrong 2018; Lindblom, Lindblom, and Wechtler 2018).

For materialistic consumers, the apparel they wear is essential for impression management since it may reflect their social status and success (Becker-Leifhold 2018). It is also important for these consumers to own this apparel as ownership of products is at the center of their lives (Lang and Armstrong 2018). However, due to the absence of permanent ownership in collaborative consumption, materialistic consumers might show resistance to collaborative consumption of apparel as they do not favor giving up the ownership of their perfectly good apparel (Akbar, Mai, and Hoffmann 2016; Lang and Armstrong 2018). Consumers with a high need for uniqueness might also show some resistance to collaborative consumption of apparel. Even if collaborative consumption platforms provide these consumers with an infinite wardrobe, giving them the chance to keep up with the latest fashion trends at an affordable cost, there is the risk of wearing similar apparel as others and not standing out from the crowd (Lang and Armstrong 2018).

In light of these findings in prior research, the effect of the different types of value perceptions on consumers’ attitudes and behavioral intentions toward collaborative consumption is expected to be weaker for consumers scoring high on materialism and the need for uniqueness. Otherwise stated, we expect that
materialism and the need for uniqueness will have a negative moderating effect on the impact of value perceptions on consumers’ attitudes and behavioral intentions toward collaborative consumption.

H7: Materialism negatively moderates (weakens) the effect that value perceptions (utilitarian, hedonic and symbolic) have on female consumers’ (a) attitudes toward collaborative consumption of apparel and (b) behavioral intentions to engage in collaborative consumption of apparel.

H8: The need for uniqueness negatively moderates (weakens) the effect that value perceptions (utilitarian, hedonic and symbolic) have on female consumers’ (a) attitudes toward collaborative consumption of apparel and (b) behavioral intentions to engage in collaborative consumption of apparel.

The conceptual model shown in Figure 1 is proposed based on the existing literature.

3. Research methodology
3.1. Measures
All the measurement items were derived from extant literature and adapted to the research context. The items measuring the different value perceptions (three items for utilitarian value, three items for hedonic value, and three items for symbolic value) and the four items measuring empathy were all taken from Hwang and Griffiths (2017). Consumers’ attitude toward collaborative consumption was also measured by the four items adopted from Hwang and Griffiths (2017), while consumers’ behavioral intention to engage in collaborative consumption was measured by the two items adapted from Lamberton and Rose (2012). Of the two personality traits used as moderators, materialism was measured through a four-item scale from Lang and Armstrong (2018). The need for uniqueness was measured through a three-item scale from Mazodier and Merunka (2014). These two scales were the shortened versions of the original scales developed by Richins (2004) and Tian and McKenzie (2001), respectively. Since the original measurement items were all in English, a back-translation process was applied to translate the measurement items into Turkish. In the last part of the questionnaire, demographic information regarding the respondents, such as age, marital status, education, personal monthly income and working status, was collected. All items except demographic information were measured using five-point Likert or semantic differential scales. For ensuring the clarity of measurement items, a pilot test was conducted using a convenience sample of 12 graduate students, and the necessary revisions were made based on their feedback.

Figure 1. Conceptual model
3.2. Data collection and sample

The data was collected via an online self-administered scenario-based survey. In recent years, collaborative consumption of apparel has started gaining attention among academics (Becker-Leifhold 2018; Iran, Geiger, and Schrader 2019; Park and Armstrong 2019a). It has also become popular, especially among female consumers worldwide, including in Turkey. Thus, a collaborative apparel consumption service is chosen as the focus for the scenario. The scenario to be used is adopted from the study by Hwang and Griffiths (2017) and translated into Turkish. As suggested, a hypothetical company is used to avoid Biasing the respondents by the company name. Initially, the respondents were told that their participation in the study would be voluntary and that their responses would be kept confidential. The respondents who agreed to participate were first provided with brief information regarding the collaborative consumption practices, and then they were asked to read the presented scenario. After that, the respondents were asked to indicate their responses to the statements in the survey.

The survey was carried out through email and social media platforms (i.e., Facebook, Instagram, LinkedIn and WhatsApp), where a link to the survey was posted. Through convenience and snowball sampling techniques, 247 usable responses were collected from female consumers in Turkey within four weeks. This sample size may be considered adequate for this kind of research, given that the “ten times rule” is widely used for sample size estimations in partial least squares and structural equation modeling (PLS-SEM) that is also to be used in this study (Hair, Sarstedt, Ringle, and Mena 2012). This rule suggests that the minimum sample size should be ten times the maximum number of paths directed at any construct in the outer and inner models (Barclay, Higgins, and Thompson 1995; Hair, Sarstedt, Pieper, and Ringle 2012). The majority of the respondents were between the age groups of 25-34 years (66 %), followed by 18-24 years (27.5%) and 35-44 years (5.3%). This profile is consistent with the samples of previous studies on collaborative consumption, given that millennials constitute the leading consumer group for such collaborative practices (Hwang and Griffiths 2017; Mittendorf 2018; Činjarević, Kožo, and Berberović 2019). The demographic profile of the sample is presented in Table 1.

Due to the self-reported and cross-sectional nature of the data, there is the possibility of common method variance (CMV) that runs the risk of inflating the strength of observed structural relationships among the constructs (Ali et al. 2020). For alleviating concerns about CMV, Harman’s one-factor test was used. A total of six factors with Eigenvalues greater than one were reported. The first factor accounted for only 36.4 % of the total variance explained, suggesting that CMV is unlikely to be a severe concern for this study (Podsakoff et al. 2003).

4. Analysis and results

This study employs the PLS-SEM technique for data analysis. PLS-SEM has become popular in academia due to the various advantages it offers, such as fewer restrictions on sample size and normality of data, easiness of application to complex models.

Table 1. Sample demographics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Frequency</th>
<th>%</th>
<th>Variable</th>
<th>Category</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>18-24</td>
<td>68</td>
<td>27.5</td>
<td>Working Status</td>
<td>Private Sector</td>
<td>150</td>
<td>60.7</td>
</tr>
<tr>
<td></td>
<td>25-34</td>
<td>163</td>
<td>66.0</td>
<td>Public Sector</td>
<td>20</td>
<td>8.1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>35-44</td>
<td>13</td>
<td>5.3</td>
<td>Self-Employed</td>
<td>5</td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>45-54</td>
<td>2</td>
<td>0.8</td>
<td>Unemployed</td>
<td>18</td>
<td>7.3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>55-64</td>
<td>1</td>
<td>0.4</td>
<td>Housewife</td>
<td>15</td>
<td>6.1</td>
<td></td>
</tr>
<tr>
<td>Marital Status</td>
<td>Married</td>
<td>53</td>
<td>21.5</td>
<td>Student</td>
<td>37</td>
<td>15.0</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Single</td>
<td>194</td>
<td>78.5</td>
<td>Other</td>
<td>2</td>
<td>0.8</td>
<td></td>
</tr>
<tr>
<td>Education</td>
<td>ElementarySchool</td>
<td>1</td>
<td>0.4</td>
<td>Personal Monthly Income</td>
<td>Less than 3000 ₺</td>
<td>121</td>
<td>49.0</td>
</tr>
<tr>
<td></td>
<td>Middle School</td>
<td>-</td>
<td>-</td>
<td>3000-5999 ₺</td>
<td>106</td>
<td>42.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>High School</td>
<td>33</td>
<td>13.4</td>
<td>6000-8999 ₺</td>
<td>12</td>
<td>4.9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>University</td>
<td>162</td>
<td>65.6</td>
<td>9000-11999 ₺</td>
<td>1</td>
<td>0.4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Master</td>
<td>50</td>
<td>20.2</td>
<td>12000-14999 ₺</td>
<td>3</td>
<td>1.2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ph.D.</td>
<td>1</td>
<td>0.4</td>
<td>15000 ₺ and more</td>
<td>4</td>
<td>1.6</td>
<td></td>
</tr>
</tbody>
</table>
and flexibility in constructing theory (Rigdon 2016; Sarstedt, Ringle, and Hair 2017; Xiao and Mou 2019; Ali et al. 2020; Cao et al. 2021). In this study, SmartPLS 3 software (Ringle, Wende, and Becker 2015) is used to assess the measurement and structural models.

4.1. Measurement model assessment

The measurement model is assessed using the confirmatory composite analysis recently proposed by Hair, Howard, and Nitzl (2020) as an alternative to confirmatory factor analysis for confirming measurement models when using PLS-SEM. Following the steps outlined by Hair and his colleagues (2020), first, the loadings and their significance are examined. As a rule of thumb, the standardized factor loadings should ideally be higher than 0.70, but values higher than 0.50 are still acceptable (Hair et al. 2014). After removing the two low-loading items (less than 0.50) from the materialism construct, the results reveal that all factor loadings are very close or exceed the suggested threshold of 0.70, as shown in Table 2.

In the next step, the reliability of the constructs is measured by Cronbach’s alpha (α) and composite reliability (CR). It is suggested that both of these reliability criteria should be above 0.70 (Hair, Howard, and Nitzl 2020). As shown in Table 2, all the CR and Cronbach’s

<table>
<thead>
<tr>
<th>Construct</th>
<th>Code</th>
<th>Factor loadings</th>
<th>t-valueb,c</th>
<th>α</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Utilitarian Value</td>
<td>UV1</td>
<td>0.834</td>
<td>35.225</td>
<td>0.814</td>
<td>0.890</td>
<td>0.729</td>
</tr>
<tr>
<td></td>
<td>UV2</td>
<td>0.882</td>
<td>48.749</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>UV3</td>
<td>0.845</td>
<td>32.943</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hedonic Value</td>
<td>HV1</td>
<td>0.913</td>
<td>60.803</td>
<td>0.889</td>
<td>0.931</td>
<td>0.818</td>
</tr>
<tr>
<td></td>
<td>HV2</td>
<td>0.929</td>
<td>78.474</td>
<td></td>
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<td></td>
</tr>
<tr>
<td></td>
<td>HV3</td>
<td>0.871</td>
<td>42.428</td>
<td></td>
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</tr>
<tr>
<td>Symbolic Value</td>
<td>SV1</td>
<td>0.873</td>
<td>50.803</td>
<td>0.873</td>
<td>0.920</td>
<td>0.792</td>
</tr>
<tr>
<td></td>
<td>SV2</td>
<td>0.916</td>
<td>57.174</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>SV3</td>
<td>0.881</td>
<td>39.942</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empathy</td>
<td>EMP1</td>
<td>0.747</td>
<td>15.468</td>
<td>0.861</td>
<td>0.906</td>
<td>0.707</td>
</tr>
<tr>
<td></td>
<td>EMP2</td>
<td>0.901</td>
<td>56.100</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EMP3</td>
<td>0.892</td>
<td>53.570</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>EMP4</td>
<td>0.814</td>
<td>22.870</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Attitude</td>
<td>ATT1</td>
<td>0.930</td>
<td>77.865</td>
<td>0.926</td>
<td>0.948</td>
<td>0.820</td>
</tr>
<tr>
<td></td>
<td>ATT2</td>
<td>0.863</td>
<td>31.283</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ATT3</td>
<td>0.907</td>
<td>38.258</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ATT4</td>
<td>0.920</td>
<td>60.349</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Behavioral Intention</td>
<td>BIE1</td>
<td>0.958</td>
<td>124.825</td>
<td>0.909</td>
<td>0.957</td>
<td>0.917</td>
</tr>
<tr>
<td></td>
<td>BIE2</td>
<td>0.957</td>
<td>121.185</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Materialism</td>
<td>MAT1</td>
<td>0.900</td>
<td>5.032</td>
<td>0.702</td>
<td>0.890</td>
<td>0.769</td>
</tr>
<tr>
<td></td>
<td>MAT2a</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MAT3a</td>
<td>-</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>MAT4</td>
<td>0.854</td>
<td>4.092</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Need for Uniqueness</td>
<td>NFU1</td>
<td>0.683</td>
<td>2.570</td>
<td>0.849</td>
<td>0.865</td>
<td>0.686</td>
</tr>
<tr>
<td></td>
<td>NFU2</td>
<td>0.795</td>
<td>3.488</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>NFU3</td>
<td>0.979</td>
<td>3.343</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a The item was problematic, so it was removed from the final analysis.
b t-values were obtained by executing 5000 Bootstrap runs.
c Absolute t-values>1.96 were two-tailed significant at 5%.
alpha values are higher than the threshold of 0.70, indicating a good level of reliability. The convergent validity was assessed by examining the average variance extracted (AVE). As suggested by Fornell and Larcker (1981), AVE values should be greater than 0.50. Table 2 shows that the AVE of all constructs exceeds this threshold value of 0.50, indicating good convergent validity. For assessing the discriminant validity, both Fornell-Larcker’s criterion and the heterotrait-monotrait ratio of correlations (HTMT), as proposed by Henseler, Ringle, and Sarstedt (2015), were used. As shown in Table 3, the AVE square root of each construct is higher than the absolute value of its correlation with other constructs in the model, as suggested by Fornell and Larcker (1981). Table 3 also shows the ratio of correlations for HTMT, and it is observed that all the HTMT ratios are less than the widely accepted threshold of 0.85 (Voorhees et al. 2015). All these results indicate that discriminant validity is also acceptable.

4.2. Structural model assessment

Following the recommendations by Hair, Howard, and Nitzl (2020), this study first tests the multicollinearity of the structural model constructs before testing the hypotheses. For that, the variance inflation factor (VIF) values are examined. All VIF values are less than 5, suggesting that multicollinearity is unlikely to be a problem in this study (Hair et al. 2014). The model fit is also assessed by examining the standardized root-mean-square residual (SRMR). A value that is less than 0.080 is usually considered a relatively good fit (Hu and Bentler 1999). In this study, the SRMR is calculated as 0.078, suggesting a relatively good fit between the hypothesized model and the data (Henseler, Ringle, and Sarstedt 2015; Hair et al. 2017). Next, the structural relationships in the proposed model are tested by using a PLS algorithm and a bootstrapping procedure (based on 5000 bootstrap samples). The path coefficients, standard errors (SE), t-values and accompanying bootstrap confidence intervals at 95% are shown in Table 4. An examination of path coefficients and significance levels suggests eight of the direct effects and three of the moderating effects were significant.

The results indicate that utilitarian value ($\beta=0.338$, $p < 0.001$) and symbolic value ($\beta=0.268$, $p < 0.001$) both have a significant and positive effect on consumers’ attitudes toward collaborative consumption of apparel, supporting H1a and H3a. However, hedonic value is found to have no significant effect on consumers’ attitudes ($\beta=0.020$, $p > 0.05$), failing to support H2a. Regarding consumers’ behavioral intentions, it is found that both hedonic value ($\beta=0.161$, $p < 0.05$) and symbolic value ($\beta=0.187$, $p < 0.01$) have a positive and significant effect on behavioral intention to engage in collaborative consumption of apparel. In contrast, the effect of utilitarian value on consumers’ behavioral intentions ($\beta= -0.012$, $p > 0.05$) is found to be not significant. Even if these results fail to support H1b, they support H2b and H3b. Hedonic value ($\beta=0.350$, $p < 0.001$) and symbolic value ($\beta=0.224$, $p < 0.01$) are also found to have a significant and positive effect on empathy, supporting H4b and H4c. Since the effect of utilitarian value on empathy ($\beta=0.065$, $p > 0.05$) is not significant, H4a is not supported. Next, empathy is found to have a positive effect on consumers’ attitudes ($\beta=0.229$, $p < 0.001$), while its effect on behavioral intentions ($\beta=0.012$, $p > 0.05$) is not significant, supporting only H5a but not H5b. Finally, as expected, consumers’ attitudes positively and significantly affect their behavioral intentions to engage in collaborative consumption of apparel ($\beta=0.534$, $p < 0.001$).

Table 3. Correlations and discriminant validity results

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Utilitarian Value</td>
<td><strong>0.854</strong></td>
<td>0.427</td>
<td>0.593</td>
<td>0.369</td>
<td>0.640</td>
<td>0.517</td>
<td>0.096</td>
<td>0.086</td>
</tr>
<tr>
<td>2. Hedonic Value</td>
<td>0.360</td>
<td><strong>0.905</strong></td>
<td>0.660</td>
<td>0.563</td>
<td>0.458</td>
<td>0.555</td>
<td>0.080</td>
<td>0.165</td>
</tr>
<tr>
<td>3. Symbolic Value</td>
<td>0.530</td>
<td>0.603</td>
<td><strong>0.890</strong></td>
<td>0.519</td>
<td>0.594</td>
<td>0.627</td>
<td>0.074</td>
<td>0.096</td>
</tr>
<tr>
<td>4. Empathy</td>
<td>0.309</td>
<td>0.509</td>
<td>0.470</td>
<td><strong>0.841</strong></td>
<td>0.522</td>
<td>0.480</td>
<td>0.094</td>
<td>0.141</td>
</tr>
<tr>
<td>5. Attitude</td>
<td>0.557</td>
<td>0.419</td>
<td>0.565</td>
<td>0.469</td>
<td><strong>0.905</strong></td>
<td>0.766</td>
<td>0.148</td>
<td>0.131</td>
</tr>
<tr>
<td>6. Behavioral Intention</td>
<td>0.446</td>
<td>0.500</td>
<td>0.586</td>
<td>0.428</td>
<td>0.706</td>
<td><strong>0.958</strong></td>
<td>0.135</td>
<td>0.110</td>
</tr>
<tr>
<td>7. Materialism</td>
<td>0.076</td>
<td>-0.049</td>
<td>-0.044</td>
<td>-0.017</td>
<td>0.117</td>
<td>0.109</td>
<td><strong>0.877</strong></td>
<td>0.665</td>
</tr>
<tr>
<td>8. Need for Uniqueness</td>
<td>0.026</td>
<td>0.030</td>
<td>0.080</td>
<td>0.125</td>
<td>0.161</td>
<td>0.137</td>
<td>0.489</td>
<td><strong>0.828</strong></td>
</tr>
</tbody>
</table>

Diagonal and italicized elements are the square roots of the AVE. Below the diagonal elements are the correlations between the constructs. Above the diagonal elements are the HTMT values.
p < 0.001), supporting H6. The results of the hypotheses tests are summarized in Table 4.

It is also important to examine the predictive ability of the structural model. Two different metrics - the coefficient of determination ($R^2$) and Stone-Geisser's $Q^2$ value (Geisser, 1974; Stone, 1974) - may be used for assessing prediction (Hair, Howard, and Nitzl 2020). Of these two metrics, the more commonly used one is $R^2$. Even if $R^2$ is claimed to vary depending on the research field, the $R^2$ values of 0.75, 0.50 and 0.25 are generally considered substantial, moderate and weak, respectively (Sarstedt, Ringle and Hair 2017). The $R^2$ (empathy)=0.303, $R^2$ (attitude)=0.455 and $R^2$ (behavioral intention) =0.567 suggest that all $R^2$ values are acceptable. In addition to $R^2$, the $Q^2$ may also be used to assess the model’s predictive ability. Even if,

Table 4. Structural model results

<table>
<thead>
<tr>
<th>Structural path</th>
<th>Path coefficient</th>
<th>Boot SE</th>
<th>t-value</th>
<th>%95 confidence interval</th>
<th>Support Yes/No</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Direct effects</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Utilitarian Value→Attitude</td>
<td>0.338***</td>
<td>0.061</td>
<td>5.563</td>
<td>(0.219, 0.455)</td>
<td>Supported</td>
</tr>
<tr>
<td>Utilitarian Value→Behavioral Intention</td>
<td>-0.012 n.s</td>
<td>0.069</td>
<td>0.177</td>
<td>(-0.146, 0.126)</td>
<td>Not Supported</td>
</tr>
<tr>
<td>Hedonic Value→Attitude</td>
<td>0.020 n.s</td>
<td>0.064</td>
<td>0.309</td>
<td>(-0.115, 0.137)</td>
<td>Not Supported</td>
</tr>
<tr>
<td>Hedonic Value→Behavioral Intention</td>
<td>0.161*</td>
<td>0.070</td>
<td>2.299</td>
<td>(0.023, 0.301)</td>
<td>Supported</td>
</tr>
<tr>
<td>Symbolic Value→Attitude</td>
<td>0.269***</td>
<td>0.067</td>
<td>4.007</td>
<td>(0.133, 0.397)</td>
<td>Supported</td>
</tr>
<tr>
<td>Symbolic Value→Behavioral Intention</td>
<td>0.187**</td>
<td>0.072</td>
<td>2.597</td>
<td>(0.047, 0.326)</td>
<td>Supported</td>
</tr>
<tr>
<td>Utilitarian Value→Empathy</td>
<td>0.065 n.s</td>
<td>0.079</td>
<td>0.822</td>
<td>(-0.084, 0.221)</td>
<td>Not Supported</td>
</tr>
<tr>
<td>Hedonic Value→Empathy</td>
<td>0.350***</td>
<td>0.082</td>
<td>4.272</td>
<td>(0.184, 0.498)</td>
<td>Supported</td>
</tr>
<tr>
<td>Symbolic Value→Empathy</td>
<td>0.224**</td>
<td>0.083</td>
<td>2.709</td>
<td>(0.064, 0.387)</td>
<td>Supported</td>
</tr>
<tr>
<td>Empathy→Attitude</td>
<td>0.229***</td>
<td>0.060</td>
<td>3.817</td>
<td>(0.116, 0.348)</td>
<td>Supported</td>
</tr>
<tr>
<td>Empathy→Behavioral Intention</td>
<td>0.012 n.s</td>
<td>0.059</td>
<td>0.205</td>
<td>(-0.098, 0.133)</td>
<td>Not Supported</td>
</tr>
<tr>
<td>Attitude→Behavioral Intention</td>
<td>0.534***</td>
<td>0.060</td>
<td>8.938</td>
<td>(0.416, 0.653)</td>
<td>Supported</td>
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<tr>
<td><strong>Moderating effects</strong></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Utilitarian Value*Materialism→Attitude</td>
<td>-0.126**</td>
<td>0.045</td>
<td>2.792</td>
<td>(-0.231,-0.064)</td>
<td>Supported</td>
</tr>
<tr>
<td>Hedonic Value*Materialism→Attitude</td>
<td>0.008 n.s</td>
<td>0.074</td>
<td>0.105</td>
<td>(-0.131, 0.156)</td>
<td>Not Supported</td>
</tr>
<tr>
<td>Symbolic Value*Materialism→Attitude</td>
<td>-0.097 n.s</td>
<td>0.129</td>
<td>0.749</td>
<td>(-0.191, 0.228)</td>
<td>Not Supported</td>
</tr>
<tr>
<td>Utilitarian Value*Materialism→Behavioral Intention</td>
<td>-0.001 n.s</td>
<td>0.055</td>
<td>0.010</td>
<td>(-0.117, 0.120)</td>
<td>Not Supported</td>
</tr>
<tr>
<td>Hedonic Value*Materialism→Behavioral Intention</td>
<td>-0.130**</td>
<td>0.040</td>
<td>3.283</td>
<td>(-0.210,-0.058)</td>
<td>Supported</td>
</tr>
<tr>
<td>Symbolic Value*Materialism→Behavioral Intention</td>
<td>-0.073 n.s</td>
<td>0.083</td>
<td>0.882</td>
<td>(-0.145, 0.164)</td>
<td>Not Supported</td>
</tr>
<tr>
<td>Utilitarian Value*Need for Uniqueness→Attitude</td>
<td>-0.115 n.s</td>
<td>0.063</td>
<td>1.817</td>
<td>(-0.211, 0.088)</td>
<td>Not Supported</td>
</tr>
<tr>
<td>Hedonic Value* Need for Uniqueness→Attitude</td>
<td>-0.034 n.s</td>
<td>0.068</td>
<td>0.496</td>
<td>(-0.174, 0.128)</td>
<td>Not Supported</td>
</tr>
<tr>
<td>Symbolic Value* Need for Uniqueness→Attitude</td>
<td>0.036 n.s</td>
<td>0.045</td>
<td>0.790</td>
<td>(-0.077, 0.103)</td>
<td>Not Supported</td>
</tr>
<tr>
<td>Utilitarian Value*Need for Uniqueness→Behavioral Intention</td>
<td>-0.135 n.s</td>
<td>0.131</td>
<td>1.031</td>
<td>(-0.258, 0.210)</td>
<td>Not Supported</td>
</tr>
<tr>
<td>Hedonic Value* Need for Uniqueness→Behavioral Intention</td>
<td>-0.095 n.s</td>
<td>0.078</td>
<td>1.221</td>
<td>(-0.227, 0.169)</td>
<td>Not Supported</td>
</tr>
<tr>
<td>Symbolic Value*Need for Uniqueness→Behavioral Intention</td>
<td>-0.145**</td>
<td>0.045</td>
<td>3.240</td>
<td>(-0.236,-0.076)</td>
<td>Supported</td>
</tr>
</tbody>
</table>

Note: *p <0.05, ** p <0.01, *** p <0.001, n.s = Not significant
as a rule of thumb, any $Q^2$ value higher than zero is considered acceptable, the $Q^2$ values of 0.02, 0.15 and 0.35 are mentioned as thresholds for a small, medium, or large predictive relevance, respectively (Sarstedt, Ringle, and Hair 2017). Using the blindfolding approach, the $Q^2$ that is calculated for empathy, attitude and behavioral intention is 0.202, 0.365 and 0.503, suggesting that the model is predictive.

### 4.3. Moderating effects

For testing the moderating effects of materialism and the need for uniqueness, the PLS-product indicator approach was used (Chin, Marcolin, and Newsted 2003). The moderation analyses were run in such that only one moderator was considered at a time. The results of the moderation analyses are also provided in Table 4. These results reveal that materialism weakens utilitarian value’s effect on consumers’ attitudes ($\beta=-0.126$, $p < 0.01$) and hedonic value’s effect on consumers’ behavioral intentions ($\beta=-0.130$, $p < 0.01$), but it does not have a significant moderating effect on other hypothesized relationships. Thus, H7a and H7b are partially supported. Concerning the moderating effect of the need for uniqueness, the results indicate that the need for uniqueness negatively affects the relationship between symbolic value and consumers’ behavioral intentions to engage in collaborative consumption ($\beta=-0.145$, $p < 0.01$). However, it shows no significant moderating effect on other relationships. Thus, while H8a is not supported, H8b is partially supported.

### 5. Discussion and implications

Collaborative consumption has emerged as the new trend of this century, and powered by the advances in information technology, this alternative to traditional ownership-based consumption has grown among consumers and investors (Paro et al. 2021). Thus, it is nowadays possible to see examples of various collaborative consumption platforms across various industries, including the apparel industry. Especially women are very much interested in this new form of ownership. Building on this interest, this study focuses on the apparel industry and investigates how the different value perceptions—utilitarian, hedonic and symbolic—affect female consumers’ attitudes toward collaborative consumption of apparel and their behavioral intentions to engage in such practices. The results of the study reveal that value perceptions significantly affect female consumers’ attitudes and behavioral intentions toward collaborative consumption of apparel. Yet, it is essential to note that the effect of each value perception is different and thus, needs to be discussed separately. As expected, the utilitarian value associated with collaborative consumption positively affects female consumers’ attitudes toward such practices. This finding is in line with the findings of earlier studies (Bucher, Fieseler, and Lutz 2016; Hwang and Griffiths 2017; Baek and Oh 2021). However, contrary to expectations, the results do not support the relationship between utilitarian value and behavioral intentions. This unexpected finding suggests that other value perceptions might affect behavioral intentions more strongly than utilitarian value perceptions. Even if limited in number, there are other studies that report similar findings (Möhlmann 2015; Ianole-Calin, Druica, Hubona, and Wu 2021).

In particular, the results of this study show that hedonic and symbolic values are more meaningful drivers for behavioral intention to engage in collaborative consumption practices, at least in the context of female consumers’ behavioral intention to engage in such practices in the apparel industry. Given the apparel industry’s hedonic nature, it is not surprising that hedonic value positively affects behavioral intention to engage in collaborative consumption practices. The enjoyment and fun female consumers experience with the infinite wardrobe that collaborative consumption offers them is a significant driver to engage in such practices. With collaborative consumption, female consumers have the opportunity to have access to apparel that would otherwise be impossible for them to afford and, thus, enjoy this “Cinderella moment” (Pantano and Stylos 2020). This study also highlights the critical role symbolic value plays in the apparel context. Although there is a lack of consensus on the role of symbolic value in previous studies (Baek and Oh 2021; Vincent and Gaur 2021), the results of this study clearly reveal that symbolic value positively affects both the attitudes and behavioral intentions of female consumers toward collaborative consumption of apparel. This finding is not surprising, given that, in prior research, environmental motivations are claimed to be significantly more important for women than men (Böcker and Meelen 2017). Regarding the effect of value perceptions on empathy, only hedonic value and symbolic value are found to have a significant and positive effect, which is again in line with prior research (Hwang and Griffiths 2017). All these findings reveal that it is essential to recognize and acknowledge the different types of value perceptions, as each may have a different effect.

The results of this study also support the hypothesized relationship between empathy and attitude,
suggesting that consumers who feel empathy toward collaborative consumption of apparel are more likely to have positive attitudes toward such practices. Even if empathy may act as a significant antecedent for attitudes, contrary to the hypothesized relationship in the proposed model, empathy does not directly translate into behavioral intentions. In other words, feeling empathy toward collaborative apparel consumption is not a strong enough driver for engaging in such practices. Instead, it is through the attitudes that empathy may have an impact on behavioral intentions. As anticipated, the results reveal that attitudes have a powerful effect on behavioral intentions. This finding is consistent with Ajzen and Fishbein's (1980) theory of reasoned action.

This study also investigates the potential moderating effect of materialism and the need for uniqueness in the context of collaborative apparel consumption, and partial support for the hypothesized moderating effects is provided. In particular, the results show that materialism plays a critical role as a potential moderator because it weakens both the positive effect of utilitarian value on attitudes and the positive effect of hedonic value on behavioral intentions. The need for uniqueness also has a similar effect as the positive effect that symbolic value has on behavioral intentions is weakened for those consumers who have a higher need for uniqueness. These findings are important in showing that these personality traits should be integrated into research on collaborative apparel consumption to better understand the relationships between value perceptions and consumers’ responses to collaborative consumption of apparel.

5.1. Theoretical and managerial implications

Collaborative consumption has received considerable attention from academics and practitioners, especially within the last decade. Nevertheless, as previously stated, collaborative consumption research is still considered to be in its early stage, and further studies are needed. Building on this need, this study contributes to this research field by filling some gaps in the extant literature and extending current knowledge on collaborative consumption. First, this study focuses on collaborative apparel consumption, which has recently become quite popular, especially among female consumers and investigates the factors that affect female consumers’ attitudes and behavioral intentions toward collaborative consumption of apparel. Even if some of the findings are inconsistent with previous studies, these inconsistencies may be explained based on the industry-specific characteristics (Böcker and Meelen 2017). Thus, this study argues that industry-specific studies are highly needed to resolve some of the inconsistencies in research findings, as each factor’s significance might change depending on the industry in which that study is conducted. Second, this study confirms that value perceptions play a critical role in the context of collaborative consumption of apparel. At the same time, it also highlights the importance of studying the effects of the different types of value perceptions separately since each may have a significantly different effect on female consumers’ attitudes toward collaborative consumption and their behavioral intentions to engage in such practices. Third, the findings of this study reveal that empathy has a significant effect on female consumers’ attitudes toward collaborative consumption of apparel. It is the hedonic and symbolic values that have an impact on these empathic emotions. Thus, this study points out empathy as an important emotional factor that may enrich collaborative consumption literature. Finally, this study contributes to the literature on collaborative consumption by providing concrete evidence for the critical role that materialism and the need for uniqueness may play as moderators.

From a managerial perspective, some significant implications may also be derived from the findings of this study that will be important in helping managers of this industry approach female consumers more effectively. For many years, the utilitarian value associated with collaborative consumption has received the utmost attention among researchers as the most critical determinant of consumers’ attitudes (Barnes and Mattsson 2017; Benoit et al. 2017). However, this study reveals that hedonic and symbolic values associated with collaborative consumption are also important and suggest alternative ways for managers to enhance consumers’ attitudes and behavioral intentions toward collaborative consumption of apparel. One way is obviously by communicating the utilitarian value of collaborative consumption and enhancing consumers’ attitudes, which in turn enhances consumers’ intention to engage in such practices. For this reason, the utilitarian benefits, especially the cost savings that become possible through collaborative practices, are mostly promoted in the advertisements by companies that provide collaborative consumption goods or services (Hwang and Griffiths 2017).

However, it is also vital for managers of these companies to emphasize the hedonic and symbolic values associated with collaborative consumption in their advertisements since these values play a critical role in enhancing consumers’ attitudes and behavioral intentions. Hedonic value has a direct, positive effect on behavioral intentions. Thus, these feelings of fun
and enjoyment associated with the collaborative consumption experience, in other words, the “Cinderella moment”, may be used by managers to encourage more consumers to engage in collaborative consumption practices. Within this context, symbolic value plays an even more critical role because it has a direct, positive effect on both attitudes and behavioral intentions. Thus, managers need to acknowledge the significance of symbolic value associated with collaborative consumption practices and consider including the altruistic or social benefits in their value propositions.

In addition to these direct ways, from hedonic and symbolic values to consumers’ attitudes and/or behavioral intentions, an indirect but highly critical way may also be employed. As the results of this study reveal, hedonic and symbolic values help consumers feel empathy toward collaborative practices, which positively affects consumers’ attitudes and, in turn, behavioral intentions toward collaborative consumption. Therefore, managers should consider different ways of including the hedonic (i.e., feelings of fun, enjoyment and entertainment) and symbolic values (i.e., concern for the environmental and sustainability issues) in their commercials to approach their consumers more effectively. Managers should also consider how effective these strategies will be when paired with consumers’ personality traits. This study reveals that the effect of some value perceptions on consumers’ attitudes and behavioral intentions is weakened in consumers who are more materialistic and have a higher need for uniqueness. Thus, managers need to consider the different personality traits of their consumers and design their strategies accordingly.

5.2. Limitations and future research

While this study contributes to the literature on collaborative consumption, its findings should be assessed in light of some limitations that provide further research directions. First, the cross-sectional nature of the data and the limited sample size limit confidence in causal inferences. Thus, further research is necessary to validate the findings of the study. Second, this study investigates the effect of value perceptions on consumers’ attitudes and behavioral intentions to engage in collaborative consumption in the apparel industry. Since the industry’s characteristics may act as an important boundary condition for the hypothesized effects, future researchers need to test their models across industries. Third, even if this study’s sample mainly consists of Millennials, some respondents from the other generational cohorts also exist. As millennials are considered to be the leading consumer group for collaborative consumption practices (Hwang and Griffiths 2017; Činjarević, Kožo, and Berberović 2019), the hypothesized relationships in this study may be tested with Millennials only. Some comparative studies may also be conducted across different generational cohorts. Also, as the data collection was completed before the outbreak of the Covid-19 pandemic, it is impossible to generalize this study’s findings to the pandemic situation. Yet, it will be interesting to replicate this study after the pandemic and comparatively discuss the findings. Fourth, this study examines the moderating effect of the need for uniqueness and materialism on consumers’ attitudes and behavioral intentions toward collaborative practices. However, researchers need to integrate other personality traits such as innovativeness or experience seeking in their future studies. In addition, in this study, materialism is considered a one-dimensional concept. However, materialism also has its sub-dimensions, which are possessiveness and non-generosity (Belk 1984). It may be important to consider the effects of these sub-dimensions in the context of collaborative consumption, as each may have a different effect (Akbar, Mai, and Hoffmann 2016). Future studies may also explore new factors not covered in this study. For example, previous studies reveal that trust in the service providers and intermediaries influences the consumers’ attitudes and behavioral intentions toward the collaborative consumption practices on online platforms (Mittendorf 2018). Finally, the findings of this study are limited to female consumers in Turkey. Since gender and cultural dimensions may significantly affect consumers’ attitudes and behavioral intentions toward collaborative consumption, future researchers need to include men and consumers from other cultures.

Authors’ Note
This study is based on the first author’s master’s thesis submitted to Istanbul Bilgi University, under the supervision of the second author.
References


Böcker, L. and Meelen, T. 2017. Sharing for people, planet or profit? Analysing motivations for intended sharing
THE INFINITE WARDROBE: FEMALE CONSUMERS’ VALUE PERCEPTIONS REGARDING COLLABORATIVE CONSUMPTION OF APPAREL


Chin, W. W., Marcolin, B. L. and Newsted, P. R. 2003. A partial least squares latent variable modeling approach for measuring interaction effects: Results from a Monte Carlo simulation study and an electronic-mail emotion/attachment study. Information Systems Research 14(2):189-217.


