

Proud to be Sustainable: Upcycled versus Recycled Luxury Products

Abstract

This study explores consumers' responses to upcycled and recycled luxury products. The authors advocate that luxury brands producing upcycled goods might lead to higher consumer willingness to buy compared to luxury brands producing recycled goods. The reason for this is that consumers might attribute higher feelings of pride and greater novelty to an upcycled good than to a recycled good. When consumers' environmental concern increases, upcycled goods are better for new luxury brands than for existing ones due to their increased fit with the former, wherein the effect is higher for upcycled goods. Based on findings from three experiments, this research enriches the theoretical understanding of consumer responses to upcycled and recycled luxury products and can help companies to develop strategies to launch such products effectively.

Keywords: Upcycled products, Recycled products, Pride, Novelty, Luxury, Circular economy

1. Introduction

In the last decade, a circular economy approach, which involves lengthening the life cycle of material goods, is challenging the current linear economy and has become a priority to achieve more sustainable development worldwide. Sustainable consumption trends have motivated companies to launch sustainable new products next to their conventional non-sustainable products (Olsen et al., 2014). In that sense, several brands, including luxury ones, are launching recycled and upcycled products, two typical strategies of the circular economy resulting from the increasing need to shift to a “reduce, reuse, recycle” model of production and consumption. While *recycling* is the conversion of waste into reusable material by downgrading it into raw inputs and then using these raw factors in a new industrial process, *upcycling* implies the reuse of discarded objects or material without downgrading, in such a way as to create a product of a higher quality or value than the original (Kamleitner et al., 2019; Park & Lin, 2020). Most of the previous studies indicate the potential downsides for companies using recycled materials in their products (e.g., Achabou & Dekhili, 2013; Gershoff & Frels, 2015; Luchs et al., 2010); however, upcycling production processes are very recent (Wilson, 2016) and have not yet received enough attention from researchers.

Luxury brands are not exempt from sustainability trends based on the circular economy (Schemken & Berghaus, 2018). New luxury firms are being created and started from scratch as eco-friendly natives, such as Elvis and Kresse (www.elvisandkresse.com) in the fashion accessories category using upcycling and recycling policies. Existing luxury brands have also been including upcycled and recycled products in their product portfolio gradually. For instance, Stella McCartney produces bags using fabric made from recycled water bottles and recycled polyester instead of virgin polyester. Additionally, France has issued a ban on the destruction of unsold luxury goods in favor of recycling, which will be in force from 2023.

As a consequence, there is a need to understand how consumers react to upcycled and recycled luxury products.

Research on sustainability marketing mostly focus on how to shift consumer behaviors to make them as more sustainable (White et al., 2019), underlyining the importance of repurposed products with a particular focus on recycled products (e.g., Sandin & Peters, 2018). Except for Mobley et al. (1995), literature suggests that willingness to pay for products with recycled contents and remanufactured goods (i.e. products utilize parts from postconsumer products) is low due to perceived quality and risks (Achabou & Dekhili, 2013; Anstine, 2000; Essoussi & Linton, 2010; Hamzaoui-Essoussi & Linton, 2014; Hazen et al., 2017; Rucker, 2009). Consecutive studies are about antecedents of consumer demand for recycled products made from waste. For instance, Magnier et al. (2019) indicated that anticipated conscience (i.e., expectations regarding how the product will make a consumer feel in an ethical sense), value for money, recycling production process recognisability, perceived functionality, and safety positively influenced purchase intention and willingness to pay a premium price for products made of recycled ocean plastic; however, the effect is lowered by contamination risk. Contamination and disgust perceptions were discussed as two barriers of recycled products made from waste which are close contact with the skin (Meng & Leary, 2019). However, a recent study proved that green self-identity influences positively perceived value of recycled products (e.g. bioplastics) leading to higher behavioral intentions (Confente et al., 2020).

Another technique that implies the usage of repurposed products is upcycling. Research regarding upcycled products distinguishes between contributions aiming at describing the production process (Bridgens et al., 2018; Keith & Silies, 2015; Wilson, 2016), and just few contributions aiming at studying consumer demand factors in terms of a marketer's perspective (Kamleitner et al., 2019; Park & Lin, 2020). Related to the latter

stream of research, Park & Lin (2020) indicated that self-expressiveness influences the probability of intention to purchase upcycled products but not second-hand ones. Moreover, Kamleitner et al. (2019) proved that using a storytelling approach about a product's past identity can promote demand for repurposed products due to storied products provide customers with felt specialness.

Consequently, while most studies on repurposed products were concentrated on consumer reactions to recycled products (Achabou & Dekhili, 2013; Confente et al., 2020; Magnier et al., 2019; Meng & Leary, 2019; Mobley et al., 1995; Park & Lin, 2020), there are limited studies on upcycled products, mostly qualitative (Bridgens et al., 2018; Keith & Silies, 2015; Wilson, 2016) except two empirical ones (Kamleitner et al., 2019; Park & Lin, 2020). However, these studies have not analyzed how consumers react to upcycled and recycled luxury products, yet and more importantly, previous research did not clarify which one will be better perceived and explained why.

Practice seems to suggest that especially new luxury brands are basing their business on sustainability and the circular economy, whereas existing luxury brands tend to express their attention to sustainability through the launch just of some niche dedicated product lines. This tendency seems partially confirmed by previous literature that on the one hand underlined the incompatibility between luxury and sustainability (e.g., Achabou & Dekhili, 2013; Davies et al., 2012; Kapferer & Michaut-Denizeau, 2014), and on the other hand suggested some compatibilities (Amatulli et al., 2019; De Angelis et al., 2017; Janssen et al., 2014). However, previous findings did not distinguish between new and existing luxury brands and did not clarify for which kind of brand the use of circular economy practices (i.e., upcycling and recycling) is better fitting and therefore better perceived. Aiming at covering these gaps, the present study contributes to research in the luxury market as well as sustainability, and focuses on upcycled and recycled luxury products.

2. Theoretical Framework and Hypotheses

2.1 Luxury and Sustainability

A focal characteristic of luxury branding is to highlight memorable experiences (Seo et al., 2015), inspiring pleasure and appreciation (Brun & Castelli, 2013). In doing that, luxury brands use superior raw materials, offering customers high perceived quality (Ko et al., 2016; Wiedmann & Hennigs, 2013). As a consequence, previous studies seem not to see a fit between luxury and sustainability (e.g., Achabou & Dekhili, 2013; Davies et al., 2012). However, the focus of luxury brands on “hand-made” quality and timeless durability (Byun & Sternquist, 2011; Joy et al., 2012) prevents the waste derived from using natural resources (Guercini & Ranfagni, 2014), therefore undermining an inherent compatibility between luxury and sustainability in the light of quality and durability, especially in the fashion industry (De Angelis et al., 2017). In recent years luxury brands have significantly strengthened their commitment to reducing their environmental impact (Davies et al., 2012; De Angelis et al., 2017; Janssen et al., 2014). In fact, 32 companies leading the fashion industry have together defined a set of shared objectives to be reached, in the so-called Fashion Pact (<https://thefashionpact.org/>). This coalition of environmentally concerned firms includes big names from the luxury sector such as Kering and LVMH. This increasing attention of luxury to sustainability is also strengthened by the higher environmental concern that characterizes customers and in particular young consumers (Unilever, 2017). In fact, as reported by Luxe Digital (2019), 85% of global luxury sales growth is driven by Millennials and Gen Z consumers.

Following this influence, many existing luxury brands are launching new pro-environmental initiatives, campaigns, and products. In that sense, luxury firms can employ various sustainable strategies: They can render the process of marketing products more environmentally friendly in for instance packaging; or the production process can be reformed

in a greener way such as reducing energy and water consumption; or they can develop new green products using innovative sustainable raw materials such as mylo (i.e., the root structure of a mushroom) used as a leather alternative; or other options could be the use of repurposed materials through recycling or upcycling production processes.

2.2. Repurposed Products: Upcycled versus Recycled Products

Upcycling is a relatively new sustainable mode of production that “prolongs the life of old objects by creatively reusing and reshaping them into new products” (Kamleitner et al., 2019, p. 77). Upcycling shares the product reuse benefit with other sustainable practices including recycling, namely the conversion of waste into reusable material (Winterich et al., 2019). However, despite both sustainable practices involving the repurposing of old products (Kamleitner et al., 2019), in contrast to recycling, upcycling does not imply the downgrading of raw materials. In recycling, the process of downgrading requires energy and water usage. Moreover, not all of the material in the original product will be reclaimed and a portion of raw material still does become waste (Wilson, 2016). In upcycling, there is no degradation of the material and the lifespan of the material is extended. More importantly, it requires creativity and originality to reform the existing product into something useful and nice again. Despite a huge number of studies examining the relationship between luxury and sustainability (e.g., Achabou & Dekhili, 2013), little is known about consumers’ perceptions of luxury brands producing upcycled versus recycled products, what is the mechanism that leads to such perceptions, and if such production processes can be profitable also for existing luxury brands, or only for new ones.

Despite past studies in the field of pro-environmental behavior tending to focus the attention on negative emotions, such as guilt and shame (Amatulli et al., 2019; Pelozo et al.,

2013; Theotokis & Manganari, 2015), there is a consistent stream of research that shows the pivotal role of *pride* in triggering green consumption (Peter & Honea, 2012; Schneider et al., 2017).

Anticipated guilt has been shown to influence consumers' decisions to buy ethically (Bamberg & Möser, 2007; Kaiser, 2006; Steenhaut & Van Kenhove, 2006); however, feelings such as empathy toward others (Granzin & Olsen, 1991), empathy toward the natural environment (Nisbet et al., 2009; Schultz, 2000) and pleasing feelings of self-accountability (Peloza et al., 2013) have also been identified as determinants of sustainable choices.

Moreover, in the context of green behaviors, anticipating one's positive future emotional state just prior to making a decision has been demonstrated to lead to higher pro-environmental intentions compared to anticipating one's negative emotional state derived from inaction (Baumeister et al., 2008; Schneider et al., 2017; Van der Schalk et al., 2012). This suggests a rethinking in the domain of environmental messaging, which has traditionally favored inducing negative emotions, such as guilt, to promote eco-friendly actions (Schneider et al., 2017), in favor of positive emotions, such as *pride*, in influencing consumers' desire to engage in future responsible choices (Patrick et al., 2009; Williams & DeSteno, 2008).

According to Rodriguez Mosquera et al. (2000), pride can be defined as a pleasant feeling associated with self-achievement. This positive emotion is triggered by goal achievement or by a positive evaluation of a competent person (Weiner, 1986), in such a way that pride motivates individuals to take advantage of legitimate opportunities to gain status (Louro et al., 2005). Griskevicius et al. (2010) suggested that consumers can engage in green consumption with the expectations of positive portrayal of their self-image and to gain status.

Consequently, luxury sustainable (i.e., repurposed) products might create the highest pride relative to non-sustainable luxury products.

This proposition is based on two main arguments. First, even though pride and guilt are elicited by a very similar appraisal process (Antonetti & Maklan, 2014), the main difference is that, while guilt is experienced in cases of goal incongruence, pride is caused by goal-congruent events (Ellsworth & Smith, 1988; Roseman, 1991). Buying a luxury item can be perceived as a form of self-achievement that increases personal status and therefore pride. In fact, luxury consumption has been demonstrated to be systematically interrelated with pride (McFerran et al., 2014), since gaining status (i.e., through the acquisition of luxury items) serves to increase positive thoughts, ideas, or images related to that action, which in turn drive people toward greater future achievements (Fredrickson, 2001). In sum, pride (vs. guilt) is congruent with both sustainable and luxury consumption, therefore it may explain luxury sustainable consumption patterns. Second, most consumers believe in behaving in an ethical and sustainable manner (Peloza et al., 2013) and consumers have strong desire to feel good about themselves. If people believe that something they have done is moral and valued, they are likely to feel proud of this behavior (Bissing-Olson et al., 2016). Onwezen et al. (2013) found that anticipated pride mediated the effects of normative attitudes concerning environmentally friendly behavior on intentions to buy environmentally friendly products. Moreover, Johnson et al. (2018) found that purchase intention for sustainable (vs. conventional) luxury products are higher due to increased pride caused by both signaling socially responsible behavior and financial status. Pride enhances feelings of effectiveness as a self-conscious and moral emotion (Antonetti & Maklan, 2014) and therefore consumers who feel a sense of pride might subsequently involve in sustainable behaviors and intentions. As a consequence, thinking about purchasing a luxury product that is also sustainable would be perceived positively by consumers, since it would elicit in them the feeling of pride. The sustainable luxury product could be produced by using either upcycling or recycling techniques. Thus:

H1: Consumers have higher positive evaluations toward sustainable luxury products (upcycled and recycled) compared to non-sustainable ones due to increased pride.

The production of both upcycled and recycled products relies on transforming already existing materials; the difference is whether or not it breaks down the original materials. The creative influence, aesthetic quality, excellent craftsmanship and skills are required for re-purposing of the materials to obtain successful upcycled products (Bridgens et al., 2018). Since there is no breaking down of the existing materials in the production of upcycled products, consumers might perceive them as more creative and novel than recycled products. As a consequence, compared to recycling, upcycling as a creative activity (Bridgens et al., 2018) may offer the experiences of self-expression, group affiliation, special memories, and pleasure, all of which are possible product attachment determinants (Yu & Lee, 2019). Novelty is known to increase product evaluations (Carpenter et al., 1994; Mukherjee & Hoyer, 2001) and product perceived value (Andrews & Smith, 1996). Since upcycled new products might be perceived as more novel (Bridgens et al., 2018) and radical than recycled products (Braungart et al., 2007), consumers might evaluate them more positively in terms of purchase intention. As a consequence, compared to recycled luxury products, upcycled luxury products might positively affect consumers' purchase intentions, and this relationship might explained by the novelty perception. Thus:

H2: Upcycled luxury products generate higher purchase intention compared to recycled luxury products due to increased novelty.

As already noted, today people foresee a common future between luxury and sustainability, especially in the fashion industry (De Angelis et al., 2017); in fact, an increasing number of new luxury brands, such as Elvis & Kresse, Reformation, and The R

Collective choose sustainability, and in particular upcycled and recycled products, as their core business. Very few existing luxury brands are actively involved in producing recycled or upcycled products, and even if they are, they do not advertise this activity extensively in their marketing campaigns, or they adapt their brand names. For example, Gucci launched a circular economy initiative of waste leather and textiles generated during the production process, adapting its brand name (i.e., Gucci-Up); similarly, Prada introduced a handbag line made out of regenerated materials, called Prada re-nylon.

Previous literature discussed sustainability and luxury as contradictory (Achabou & Dekhili, 2013; Cervellon, 2013; Kapferer & Michaut-Denizeau, 2020) and even defined sustainable products as radical change for the luxury industry (Kapferer & Michaut-Denizeau, 2020). Indeed, there are additional challenges specific to upcycled and recycled products in the luxury industry, given that they are produced through already processed or used materials (i.e., not virgin). As already noted, repurposed products are obtained through the physical distortion of existing products (Trudel & Argo, 2013). In general, consumers can hesitate to buy repurposed products because they are apparently previously used (Hood, 2016) or contaminated by other people (Argo et al., 2006; Meng & Leary, 2019; Morales & Fitzsimons, 2007). However, these concerns might be less prevalent when these products are introduced by luxury brands, especially by existing established ones, given the higher quality reputation that characterizes those luxury brands (i.e. Janssen et al., 2014). In fact, according to signaling theory (Rao et al., 1999), existing established brand names might bring extra warranty for quality for repurposed products. Indeed, Mobley et al. (1995) indicated that when consumers believe that recycling does not lead to question the quality of the product, consumers assess recycled products positively and the positive effect of recycling held only for established brands and not for new unestablished brands. However, previous research did

not clarified if also novel sustainable production processes, as upcycle, can benefit from existing established luxury brand names in terms of consumers' evaluations.

Re-purposing (without melting down) the existing materials in order to create a new item, makes upcycling production process not only more creative and novel than recycled one, but also intrinsically more sustainable (Wilson, 2016). The higher sustainability and novelty that characterizes upcycling (vs. recycling) production processes is the foundation of last hypothesis, according to which consumers involved with environmental issues would perceive the novel production process of upcycling as more fitting with new (vs. existing) luxury brands. Prior literature describes fit as the perceived link between two attributes or objects (Sen & Bhattacharya, 2001), as a consequence a novel production process will be perceived as better fitting with a novel (vs. existing) luxury brand. Moreover, previous research indicated that highly involved consumers perceive a greater cause–brand fit in cause–brand alliances due to positive associations for the cause (Trimble & Rifon, 2006). Accordingly, the higher perceived fit between upcycling and new luxury brands might be mainly perceived by environmentally conscious customers, namely those customers that are able to understand the higher sustainability that upcycling (vs. recycling) production process implies. The environmentally conscious consumers are sensitive to sustainability and might actively search for the most sustainable brands or learn about the degree of sustainability of a luxury product (Kapferer & Michaut-Denizeau, 2020). When consumers' concerns about environment increase, they are very likely knowledgeable about upcycled products being more environmental friendly. Therefore, consumers fit perceptions might increase when they are more concerned about environment and in particular, they can perceive novel and more sustainable production processes as upcycling congruent with new luxury brands. On the other hand, upcycling products can be perceived as less fitting with existing brands, for which an established sustainable process, as recycling, can be perceived as more suitable.

As a consequence, consumers' evaluations of upcycled products launched by a new luxury brand might be higher compared to consumer's evaluation of upcycled products launched by an existing luxury brand due to fit and this effect might be influenced by consumers' environmental concerns. Formally:

H3: Compared to existing luxury brands, consumers perceive upcycled products by new luxury brands as more fitting with sustainable production when environmental concern increases, showing higher purchase intention for upcycled (vs. recycled) products.

(INSERT FIGURE 1-3 HERE)

3. Study 1

3.1 Data Collection

A total of 148 American Mechanical Turk (MTurk) users took part in the study. Since self-report frequency of buying luxury items were previously used in literature to obtain potential luxury buyers sample (Janssen et al., 2017; Kapferer & Laurent, 2016), participants were asked the frequency of buying luxury goods and accessories on a five-point scale (1 = Never, 2 = Rarely, 3 = Sometimes, 4 = Often, 5 = Always). After eliminating 20 subjects who stated that they never purchased any luxury goods, 128 participants were retained to test the hypotheses (41% female; $M_{\text{age}} = 36.66$, $SD = 11.31$).

This study employed a between-subjects experimental design that manipulated a sustainable new luxury product (upcycled vs. recycled) against a non-sustainable one. In particular, respondents read about the launch of an anonymous luxury brand that offers travel bags. Intentionally a known luxury brand was not used to be sure of the absence of any a priori brand knowledge; moreover, any pictures of the sustainable products was not included to avoid a possible confounding effect related to aesthetic preferences that might have

influenced product evaluation. In the sustainable condition participants read about a new travel bag made from upcycled or recycled fire horse material (Appendix A). In the non-sustainable condition, they read about a new travel bag made from superior nylon material. Superior nylon material was selected because some luxury brands, as Prada, have both nylon and renylon travel bags in their product portfolio. In all scenarios, the text about the luxury brand is the same length, with the exception that for sustainable conditions the Oxford Dictionary definition of upcycling and recycling was added respectively, for respondents who may not be familiar with these terms.

3.2. Measures

All the measures came from previous literature, were measured with seven-point scales, and indicated high reliability. The dependent variable was consumers' attitude toward a new product (Keaveney et al., 2012; $\alpha = 0.93$). Pride was measured through the authentic pride – defined as the pride deriving from specific accomplishments or goal attainments – scale adapted from Tracy & Robins (2007; $\alpha = 0.95$), because it was previously used in literature on pro-environmental behavior (Onwezen et al., 2013). Sustainability perception of a new product was measured with three items (... is an environmentally friendly/sustainable/green product). Anticipated guilt and shame (How would you feel if you bought .? Not buying this product would make me feel guilty/ashamed), price (the likelihood that would be expensive is very high), durability (The likely durability of ... is extremely high) and luxury perceptions (1= not at all luxurious, 7= very luxurious) were measured with a single item and perceived quality with two items (Yoo & Donthu, 2001; $\alpha = 0.69$). Age, gender and attitude toward sustainability (Luchs et al. 2012; $\alpha = 0.81$) were also considered as proven influential factors of sustainable behavior (Wilson, 2016).

3.3 Results and Discussion

Manipulation checks. There was a significant difference among the three new products in terms of sustainability perceptions ($F(2, 125) = 31.74, p < 0.01$). The non-sustainable condition was significantly perceived as less sustainable than both upcycled (M s of 4.15 and 5.94, $\Delta M = -1.79, p < 0.001$) and recycled conditions (M s of 4.15 and 5.74, $\Delta M = -1.59, p < 0.001$), but there was no significant difference in sustainability perceptions between recycled and upcycled (M s of 5.74 and 5.94, $\Delta M = -0.21, p = 0.39$). Perceptions of luxuriousness, quality, durability and price did not significantly differ among the three conditions.

Hypothesis tests. One-way ANCOVA was conducted by setting attitude toward a product as a dependent variable, new product type as an independent variable (0: non-sustainable, 1: recycled, 2: upcycled), and attitude toward sustainability, age and gender as covariates. There was a significant difference in attitude toward a new product among the three products ($F(2, 122) = 5.44, p < 0.01$). Age ($F(1,122) = 7.83, p < 0.01$) and attitude toward sustainability ($F(1,122) = 18.01, p < 0.001$) had a significant effect on new product attitudes; however gender did not ($F(1,122) = 0.98, p = 0.32$). The post-hoc test indicated that participants' attitude to the recycled and upcycled conditions were significantly more favorable than those in the non-sustainable condition (M s of 5.68 and 4.88, $\Delta M = 0.79, p < 0.01$ for recycled; M s of 5.72 and 4.88, $\Delta M = 0.83, p < 0.01$ for upcycled); however attitude toward a new product between recycled and upcycled luxury products was not significant (M s of 5.68 and 5.72, $\Delta M = -0.04, p = 0.87$).

H1 was tested with PROCESS Model 4 (Hayes, 2013) with 10,000 bootstrap analyses by setting attitude toward a new product as the dependent, pride as the mediator, new product type (0 = non-sustainable, 1 = recycled, 2 = upcycled) as the independent variable, and age and attitude toward sustainability as the control variables. Only an upcycled product has a significantly higher positive effect on pride ($b_{\text{upcycle}} = 0.50, p < 0.05, b_{\text{recycle}} = 0.32, p = 0.21$) and on attitude toward a new product ($b_{\text{upcycle}} = 0.41, p < 0.05, b_{\text{recycle}} = 0.33, p = 0.08$)

compared to a non-sustainable one. Pride positively influences attitude toward a new product ($b = 0.70, p < 0.001$). As predicted in H1, only the indirect effect (c) of the upcycled condition (vs. the non-sustainable one) was significant and positive ($c = 0.35, 95\% \text{ CI}[0.02,0.74]$). The indirect effect of the recycled condition (vs. the non-sustainable one) was not significant ($c = 0.23, 95\% \text{ CI} [-0.18,0.66]$). Thus, H1 is confirmed only for upcycled products. Attitude toward sustainability ($b = 0.45, p < 0.001$) positively influenced pride, but it did not influence attitude toward a new product ($b = 0.10, p = 0.19$). Age has a negative effect on pride ($b = -0.06, p < 0.001$) and positive effect on attitude toward a new product ($b = 0.02, p < 0.05$).

To rule out alternative explanations, the mediating role of guilt and shame between new product type and attitude toward a product were inspected. However the confidence interval of indirect effects of guilt was not significant for both recycled ($c = -0.02, 95\% \text{ CI}[-0.11,0.04]$) and upcycled ($c = -0.02, 95\% \text{ CI}[-0.10,0.04]$) and the same was found for shame ($c = 0.01, 95\% \text{ CI}[-0.06,0.07]$ for recycled; $c = -0.01, 95\% \text{ CI}[-0.09,0.05]$ for upcycled), thus excluding the mediation role of those two emotions typically associated with sustainable consumption.

Overall, study 1 shows that consumers were more favorable toward the upcycled product relative to a non-sustainable one due to increased pride. Study 2 was conducted to validate the findings of study 1 with a new product type and to understand in detail why consumers react to upcycled or recycled luxury products differently and compare them.

4. Study 2

4.1 Data Collection and Measures

A total of 102 MTurk users were randomly assigned to one of two conditions, upcycled and recycled, in a between-subjects design. After eliminating 14 respondents who had

never purchased any luxury goods, a sample of 88 was used in testing (50% female; $M_{\text{age}} = 36.80$, $SD = 10.50$).

The conditions and procedure were similar to those used in study 1, with the following changes. First, participants' familiarity with recycled and upcycled products was measured using a single item (1 = not familiar at all ; 7 = very familiar). Then respondents read about the hypothetical new luxury brand Eluxe's new wallet model made by "discarded plastic tops" without a product picture (Appendix B). In the upcycled condition participants were informed that the luxury wallet was made from discarded plastic bottle tops as they were (not previously melted), whereas in the recycled condition they were informed that the luxury wallet was made from discarded plastic bottle tops that had been previously melted. The description of the upcycling and recycling process was included as well. Pride ($\alpha = 0.96$), and sustainability perceptions ($\alpha = 0.91$) were measured using the same scales used in study 1. However, differing from study 1, novelty as the proposed underlying mechanism (Im et al. 2015; $\alpha = 0.89$), purchase intention as the dependent (Dodds et al., 1991; $\alpha = 0.92$), concern for environment (Haws et al., 2014, $\alpha = 0.93$) and contamination as covariates (I do not expect (1)/ I expect (7) to be contaminated) were measured.

4.2 Results and Discussion

Manipulation checks. Participants exposed to the upcycled condition rated significantly higher for upcycled than those exposed to the recycled one ($M_{\text{upcycle}} = 5.8$, $M_{\text{recycle}} = 3.75$, $t = -5.55$, $p < 0.001$). Similarly, subjects in a recycled condition rated significantly higher for recycled than people in a upcycled one ($M_{\text{upcycle}} = 4.45$, $M_{\text{recycle}} = 5.59$, $t = 3.12$, $p < 0.01$). Additionally, there was no difference in sustainability perceptions between upcycled and recycled product ($M_{\text{upcycle}} = 5.56$, $M_{\text{recycle}} = 5.68$, $t = 0.50$, $p = 0.68$).

Control variables. Participants were significantly more familiar with recycled products than upcycled products ($M_{\text{upcycle}} = 4.68$, $M_{\text{recycle}} = 5.74$, $t = -6.59$, $p < 0.001$). Additionally, only significant difference in perceptions about upcycled and recycled products in terms of control variables was contamination ($M_{\text{upcycle}} = 3.02$, $M_{\text{recycle}} = 2.32$, $t = -2.05$, $p < 0.05$).

Hypothesis tests. Differences in purchase intention for the upcycled and recycled conditions was tested with one-way ANCOVA after setting age, environmental concern and gender as covariates. In line with study 1's results, there was no significant difference in purchase intention between recycled and upcycled products ($M_{\text{upcycle}} = 4.66$, $M_{\text{recycle}} = 4.59$, $F(1,83) = 0.001$, $p = 0.98$). Age ($F(1,83) = 5.26$, $p < 0.05$) and environmental concern ($F(1,83) = 55.52$, $p < 0.001$) significantly predicted purchase intention; whereas gender was not ($F(1,83) = 0.88$, $p = 0.35$).

To test H2, Model 4 was ran again by setting purchase intention as the dependent variable, repurposed product type (1: upcycle, 0: recycle) as the independent variable, and contamination as the covariate. Novelty in the upcycled condition was significantly higher than in the recycled condition ($b = 0.60$, $p < 0.01$). Product type was not significant for purchase intention when the mediator "novelty" was added ($b = 0.06$, $p = 0.84$). Novelty has a significant positive effect on purchase intention ($b = 0.43$, $p < 0.01$). Moreover, the indirect effect of an upcycled product compare to a recycled one was significant ($c = 0.26$, 95% CI[0.07, 0.50]). Thus, H2 was confirmed.

Since contamination perception was found to be significantly higher for upcycled product compared to recycled one, it was tested whether it mediates the effect of repurposed product type on purchase intention. Results showed a mediating effect of contamination perceptions between upcycled product and purchase intention ($c = -0.25$, 95% CI[-0.55, -0.01]).

To corroborate the results of study 1, pride, guilt and shame were tested whether they mediates the effect of repurposed products on purchase intention. Upcycled products have a significantly higher purchase intention than recycled products through increased pride ($c = 0.40$, 95% CI[0.03, 0.80]). None of the indirect effects of guilt and shame were significant: guilt ($c = 0.07$, 95% CI[-0.14, 0.32]) and shame ($c = 0.12$, 95% CI[-0.09, 0.36]).

Consumers prefer upcycled products more than recycled products because their pride increases, and they perceive them as more novel. Purchase intention for upcycled products was higher than for recycled products when contamination perceptions decreased.

So far, repurposed products produced by an anonymous (study 1) or a fictitious (study 2) luxury brand were investigated without considering existing luxury brands. Furthermore, existing luxury brands are introducing relatively few products made with recycled materials, whereas there is a growth in new sustainable luxury brands involved in recycling and upcycling production. The objective of study 3 is to identify for which type of luxury brand upcycled or recycled products are more suitable, and how consumers would react to those products launched by an existing luxury brand.

5. Study 3

5.1 Data Collection and Measures

Two hundred fiveteen US-based MTurk panelists participated in a 2 (repurposed product: upcycle vs. recycle) \times 2 (luxury brands: new vs. existing) between-subjects design. After omitting 26 non-luxury buyers a final sample of 189 participants was used in the analysis (51.9% female, $M_{age} = 38.39$, $SD = 13.20$).

Upcycled versus recycled products were manipulated using the same scenarios as in study 2 (Appendix C). However, they were introduced by a new (i.e., “Entoure”) or existing (i.e., “Louis Vuitton”) luxury brand. Both brands are existing French luxury brands. First,

brand familiarities (Simmons & Becker-Olsen 2006; $\alpha_{Vuitton} = 0.89$, $\alpha_{Entoure} = 0.98$), familiarity with upcycling and recycling, and prior brand attitudes (Simmons & Becker-Olsen 2006, $\alpha_{Vuitton} = 0.93$, $\alpha_{Entoure} = 0.93$) were measured. After exposed to one condition, respondents assessed perceived fit between a repurposed product and a luxury brand (Simmons & Becker-Olsen 2006; $\alpha = 0.95$). Next, they assessed attitude toward a new product ($\alpha = 0.95$), pride ($\alpha = 0.96$), novelty ($\alpha = 0.82$), manipulation checks, perceived quality ($\alpha = 0.75$), durability, perceived price, contamination ($\alpha = 0.82$), product look ($1 = unattractive/ugly$, $7 = attractive/not ugly$, $\alpha = 0.92$), post brand attitude ($\alpha = 0.92$) and finally environmental concern ($\alpha = 0.92$).

5.2 Results and Discussion

Manipulation checks. The Entoure brand was perceived more as an emerging new luxury brand compared to Louis Vuitton ($M_{Entoure} = 5.54$, $M_{Vuitton} = 3.00$, $t = -10.31$, $p < 0.001$). Louis Vuitton was perceived more as an established existing luxury brand compare to Entoure ($M_{Entoure} = 4.19$, $M_{Vuitton} = 6.23$, $t = 9.82$, $p < 0.001$). Participants who were exposed to the recycling conditions confirmed the product being recycled significantly more than those exposed to the upcycling conditions ($M_{recycle} = 6.15$, $M_{upcycle} = 4.07$, $t = 8.52$, $p < 0.001$) and the product being upcycled less than those exposed to the upcycling conditions ($M_{recycle} = 3.67$, $M_{upcycle} = 5.89$, $t = -8.59$, $p < 0.001$). Difference in luxury product perceptions was not significant between a recycled versus upcycled product condition ($M_{recycle} = 5.85$, $M_{upcycle} = 5.51$, $t = 1.81$, $p = .07$).

Participants were again significantly more familiar with recycled products than upcycled ones ($M_{upcycle} = 4.59$, $M_{recycle} = 5.84$, $t = -8.84$, $p < 0.001$). Moreover, Louis Vuitton brand was perceived as significantly more familiar than Entoure ($M_{Vuitton} = 6.04$, $M_{Entoure} = 2.56$, $t = 18.25$, $p < 0.001$).

Change in brand attitudes. First change in brand attitudes were calculated by subtracting prior brand attitudes from post ones. Change in brand attitudes was significantly different ($t = -6.03, p < 0.001$, paired t-test). Interestingly, brand attitudes for the existing luxury brand decreased, but the one for new luxury brand increased significantly after repurposed product introduction (M s, of -0.13 vs 1.04).

Hypothesis tests. H3 was tested by running Model 11. Thus, this model tested if participants' fit perceptions mediated the effect of luxury brand type (1: new, 0: existing) on attitude toward a repurposed product, and if the extent of mediation depended on a repurposed product type (1: upcycled, 0: recycled) and (mean-centered) environmental concern (i.e., moderated moderated mediation model). Since real brands were used in the experiment, prior brand attitude was added as a covariate. Novelty, pride, and contamination were added as covariates due to previous findings. Age, gender (1 for males), quality, durability and product look perceptions were also added as covariates.

A main effect of new luxury brand condition on fit was significant ($b = 1.57, p < 0.001$), indicating higher fit when a repurposed product is introduced by a new luxury brand ($M = 4.78$) compare to the existing one ($M = 3.51$). Among remaining main effects, pride ($b = 0.37, p < 0.001$) and prior brand attitude ($b = 0.26, p < 0.05$) significantly increased fit perceptions. Among two-way interactions, "brand \times environmental concern" ($b = -0.49, p < 0.05$) and "product \times environmental concern" ($b = -0.51, p < 0.05$) were significant, indicating fit perceptions reduce for a new luxury brand and an upcycled product when consumers are more environmentally conscious. There was a significant three-way interaction of brand type, repurposed product type, and environmental concern ($b = 0.99, p < 0.01$), indicating fit perceptions increase for an upcycled product by a new luxury brand when consumers are more environmentally conscious. While fit significantly decreased for upcycled products by a new brand at low values of environmental concern (<3.87), it significantly increased at high

values of environmental concern (> 6.11) relying on the Johnson-Neyman regions of significance (Figure 4).

For consumers with low environmental concern, the conditional effect of recycled and upcycled product on fit were significant, and the effect of recycled ($effect = 2.16, p < 0.001$) higher than the effect of upcycled product ($effect = 1.03, p < 0.05$). For consumers with moderate environmental concern, the conditional effect of upcycled ($effect = 1.69, p < 0.001$) and recycled ($effect = 1.51, p < 0.001$) product on fit were both significant, and almost equal. For consumers with high environmental concern, the conditional effect of upcycled and recycled product on fit were both significant and the effect of upcycled product ($effect = 2.24, p < 0.001$) was higher than the effect of recycled product ($effect = 0.97, p < 0.05$).

When attitude towards a new product was regressed on fit and remaining predictors, fit had a significant positive effect ($b = 0.11, p < 0.05$) but a new luxury brand (vs. existing) did not ($b = 0.05, p = 0.78$), indicating mediating effect of fit. Besides, when perceived quality ($b = 0.20, p < 0.05$) and product look ($b = 0.41, p < 0.001$) perceptions increase, consumers' attitude toward a repurposed product increases. Attitude toward a repurposed product decreases for older ($b = -0.01, p < 0.05$) and male consumers ($b = -0.32, p < 0.05$).

A bootstrap test revealed significant moderated mediation (index of moderated moderated mediation = 0.11, CI[0.01, 0.26]), confirming H3, and therefore, a significant positive difference in attitude toward an upcycled product compare to a recycled one by a new luxury brand through increased fit when environmental concern increases.

The conditional indirect effects of a new luxury brand for a recycled product was significant at low ($c = -1.21, CI[0.03, 0.50]$), moderate ($c = 0.12, CI[0.02, 0.34]$) and high ($c = 1.22, CI[0.01, 0.24]$) values of environmental concern. The conditional indirect effects of a new brand for an upcycled product was significant at moderate ($c = 0.12, CI[0.02, 0.37]$) and

high ($c = 1.22$, $CI[0.03, 0.50]$) values of environmental concern, but not at low values ($c = -1.21$, $CI[-0.00, 0.26]$).

Overall, Study 3 confirms that fit perceptions of environmentally conscious consumers was positive for an upcycled product by a new luxury brand compared to the one by an existing one and therefore consumer evaluations increased for an upcycled product than a recycled product. Whereas, fit assessments of upcycled products from an existing brand were lower than recycled products from them and therefore consumer evaluations reduced due to lower fit. Existing luxury brands have lower fit perceptions than a new luxury brand. Only when consumers are more concerned about environment, fit perceptions increased for a recycled product by an existing brand.

(INSERT FIGURE 4 HERE)

6. General Discussion

Three experiments were conducted to investigate consumers' evaluations of upcycled and recycled luxury products, to explain consumers' perceived differences in them, and to compare effects for existing and new luxury brands.

Study 1 indicated that consumers are favorable toward upcycled and recycled luxury products compared to non-sustainable luxury ones. The reason was hypothesized as expected pride feeling from buying an upcycled (vs. recycled) luxury product. Indeed, attitude for an upcycled product was higher than for a non-sustainable product through increased pride, as opposed to guilt and shame. Thus, pride as being a positive emotion was more effective than negative emotions, guilt or shame, in the line of previous findings (Antonetti & Maklan, 2014; Onwezen et al., 2013). Additionally, there were no differences in quality, durability and expensiveness perceptions of upcycled and recycled products compare to non-sustainable ones, probably because they were presented as introduced by a luxury brand. While

consumers' reduced perceived quality of products with recycled contents were discussed in existing literature (Achabou & Dekhili, 2013; Anstine, 2000; Essoussi & Linton, 2010; Hamzaoui-Essoussi & Linton, 2014; Hazen et al., 2017; Rucker, 2009), current findings contradict those and support findings of Magnier (2020) and Mobley et al., (1995). Only the study about recycle products in luxury context was Achabou and Dekhili (2013) and obtained negative effects of incorporating recycled materials in luxury textile. However, their conjoint study is based on partial recycled materials in luxury clothing products and more importantly, it involves an existing luxury brand *Hermes*. Besides, consumers are more negative toward touch-related products made with recycled materials such as clothing due to increased risk perceptions and the willingness to pay for recycled products are discussed as being product specific (Essoussi & Linton, 2010).

To compare consumers' preferences for luxury upcycled versus recycled products, Study 2 was conducted by investigating the role of novelty and pride. The results confirmed that novelty and pride were higher for an upcycled luxury product than a recycled one. Consequently, upcycled products were perceived as more favorable and presented higher purchase intentions than recycled ones through novelty and pride. As previous studies indicated, novelty increases product evaluations (Mukherjee & Hoyer, 2001), including evaluations for sustainable luxury brands. The findings indicated that age is negatively related with pride. Moreover, purchase intention was lower for an upcycled luxury product compared to a recycled one through increased contamination perceptions. Meng and Leary (2019) indicated that purchase intention of products made from used recycled materials was low due to contamination perceptions. However, interestingly, the same effect in Study 3 was not observed when the brand was new versus an existing leading luxury brand.

Study 3 indicated that fit perceptions increase for a repurpose product made by new luxury brands but reduce if the repurposed product is made by existing ones. Purchase

intention for an upcycled product by a new luxury brand was higher than for a recycled product by an existing luxury brand through increased fit perceptions when consumers are more concerned about environment. In line with De Angelis et al. (2017), the role of fit is important for sustainable new products from a luxury brand, and its effects changes with consumers' concern about environment. Environmental concerns was proven as a boundary condition which is in line with Yoo et al. (2021) where environmental concern was discussed as a motivational driver of upcycling and have a positive effect on buying intention toward upcycled fashion products.

6.1 Managerial Implications

Understanding consumer evaluations of repurposed products helps to reduce the need for virgin materials in future. There is a need for circular economic practices for society and this study proves that consumers are positive about these practices. For managerial implications, the findings of this study can help a more effective promotion of upcycled and recycled luxury products. For instance, storytelling about transformation of discarded materials in marketing communications can make customers to feel special about themselves and can make them feel proud.

Luxury managers should focus on making an upcycled products by a new luxury brand be perceived as luxury using creative and unique designs. Creative reuse of materials in making of upcycled products, aesthetic quality, quality assurances can help to sell upcycled products effectively. Marketing communications of upcycled luxury products should aim to increase pride and novelty feelings by focusing on excellent craftsmanship, quality, creative reuse and environment. The right segment to target upcycled products are young, female, and environmentally conscious consumers.

While new luxury brands should introduce upcycled products without worrying, existing luxury brands might focus on recycled products preferably. Since brand attitudes of an existing brand decreased after a repurposed product introduction, existing luxury brands should be very careful with their repurposed product lines. However, if they still want to introduce upcycled products lines, they should create a new line with a different brand name to prevent brand dilution. One advantage of recycled products for existing luxury brands is low or no contamination expectations due to re-processing. Brand attitude of a new brand increased after a repurposed product introduction. New luxury brands can increase their brand value introducing upcycled products and position themselves as a socially responsible corporate.

6.2 Theoretical Implications

This research contributed to the stream of luxury and sustainability literature (Achabou & Dekhili, 2013; De Angelis et al., 2017; Kessous & Valette-Florence, 2019; Park & Lin, 2020; Turunen et al., 2020) by focusing on repurposed luxury products. This research studied both upcycled and recycled products in luxury context, compared them and explained the underlying mechanisms.

Pride, novelty and fit were proved as being mediating effects which explained why consumers prefer upcycled luxury products rather than recycled ones and for what type of luxury brand. This study proved pride rather than guilt can explain sustainable products preferences. Focusing on repurposed products, this study one more time indicated that pride is an important emotion to motivate consumers' sustainability-related behaviors (Antonetti & Maklan, 2014; Onwezen et al., 2013). Novelty explained why consumers prefer upcycled luxury products, but not the recycled ones. Reduced fit perceptions caused consumers

preferences for upcycled products by a new luxury brand rather than an existing brand. This study investigated fit between repurposed products and luxury brand types and extended new product fit theories to luxury sustainability context.

6.3 Limitations and Future Research

Luxury brands and their repurposed products were the research interest in this paper however, it would be beneficial to carry out comparative experiments for mainstream brands. Material of upcycled products might cause different reactions from different segments of environmentally conscious consumers. For instance, vegan consumers might not perceive new products made of upcycling leather scraps as sustainable and react negatively to them. The findings call for further research to identify the relationship between demand for repurposed products and antecedents of luxury consumption, such as consumer need for power and status motives.

Main limitation of this research was self-report being a luxury buyer. The meaning of luxury purchase is subjective and might change with income. Therefore, using a price threshold to indicate what luxury purchase means can prevent possible errors in selecting potential luxury buyers. Moreover, in order to maximize the internal validity, non-sustainable condition in study 1 was a chemical one. However, future research could compare repurposed products to other types of non-sustainable new luxury products such as leather products. Despite this study excluded participants who never bought luxury items, additional field studies considering larger real luxury buyer samples could replicate the results found.

References

- Achabou, M. A., & Dekhili, S. (2013). Luxury and sustainable development: Is there a match? *Journal of Business Research*, 66(10), 1896–1903.
- Amatulli, C., De Angelis, M., Peluso, A. M., Soscia, I., & Guido, G. (2019). The Effect of

- Negative Message Framing on Green Consumption: An Investigation of the Role of Shame. *Journal of Business Ethics*, 157(4), 1111–1132.
- Andrews, J., & Smith, D. C. (1996). In search of the marketing imagination: Factors affecting the creativity of marketing programs for mature products. *Journal of Marketing Research*, 33(2), 174–187.
- Anstine, J. (2000). Consumers' willingness to pay for recycled content in plastic kitchen garbage bags: A hedonic price approach. *Applied Economics Letters*, 7(1), 35-39.
- Antonetti, P., & Maklan, S. (2014). Exploring Postconsumption Guilt and Pride in the Context of Sustainability. *Psychology and Marketing*, 31(9), 717–735.
- Argo, J. J., Dahl, D. W., & Morales, A. C. (2006). Consumer contamination: How consumers react to products touched by others. *Journal of Marketing*, 70(2), 81–84.
- Atwal, G., & Williams, A. (2009). Luxury brand marketing - The experience is everything! *Journal of Brand Management*, 16(5–6), 338–346.
- Bamberg, S., & Möser, G. (2007). Twenty years after Hines, Hungerford, and Tomera: A new meta-analysis of psycho-social determinants of pro-environmental behaviour. *Journal of Environmental Psychology*, 27(1), 14–25.
- Baumeister, R. F., Sparks, E. A., Stillman, T. F., & Vohs, K. D. (2008). Free will in consumer behavior: Self-control, ego depletion, and choice. *Journal of Consumer Psychology*, 18(1), 4–13.
- Bissing-Olson, M. J., Fielding, K. S., & Iyer, A. (2016). Experiences of pride, not guilt, predict pro-environmental behavior when pro-environmental descriptive norms are more positive. *Journal of Environmental Psychology*, 45, 145–153.
- Braungart, M., McDonough, W., & Bollinger, A. (2007). Cradle-to-cradle design: creating healthy emissions - a strategy for eco-effective product and system design. *Journal of Cleaner Production*, 15(13–14), 1337–1348.

- Bridgens, B., Powell, M., Farmer, G., Walsh, C., Reed, E., Royapoor, M., Gosling, P., Hall, J., & Heidrich, O. (2018). Creative upcycling: Reconnecting people, materials and place through making. *Journal of Cleaner Production*, *189*, 145–154.
- Brun, A., & Castelli, C. (2013). The nature of luxury: A consumer perspective. *International Journal of Retail & Distribution Management*, *41*(11–12), 823–847.
- Byun, S. E., & Sternquist, B. (2011). Fast fashion and in-store hoarding: The drivers, moderator, and consequences. *Clothing and Textiles Research Journal*, *29*(3), 187–201.
- Carpenter, G. S., Glazer, R., & Nakamoto, K. (1994). Meaningful Brands from Meaningless Differentiation: The Dependence on Irrelevant Attributes. *Journal of Marketing Research*, *31*(3), 339.
- Cervellon, M. C. (2013). Conspicuous conservation: Using semiotics to understand sustainable luxury. *International Journal of Market Research*, *55*(5), 697–717.
- Confente, I., Scarpi, D., & Russo, I. (2020). Marketing a new generation of bio-plastics products for a circular economy: The role of green self-identity, self-congruity, and perceived value. *Journal of Business Research*, *112*, 431–439.
- Davies, I. A., Lee, Z., & Ahonkhai, I. (2012). Do Consumers Care About Ethical-Luxury? *Journal of Business Ethics*, *106*(1), 37–51.
- De Angelis, M., Adıgüzel, F., & Amatulli, C. (2017). The role of design similarity in consumers' evaluation of new green products: An investigation of luxury fashion brands. *Journal of Cleaner Production*, *141*, 1515–1527.
- Dodds, W. B., Monroe, K. B., & Grewal, D. (1991). Effects of Price, Brand, and Store Information on Buyers' Product Evaluations. *Journal of Marketing Research*, *28*(3), 307.
- Ellsworth, P. C., & Smith, C. A. (1988). Shades of Joy: Patterns of Appraisal Differentiating Pleasant Emotions. *Cognition and Emotion*, *2*(4), 301–331.
- Essoussi, L. H., & Linton, J. D. (2010). New or recycled products: How much are consumers

- willing to pay? *Journal of Consumer Marketing*, 27(5), 458–468.
- Fredrickson, B. L. (2001). The role of positive emotions in positive psychology: The broaden-and-build theory of positive emotions. *American Psychologist*, 56(3), 218–226.
- Gershoff, A. D., & Frels, J. K. (2015). What makes it green? The role of centrality of green attributes in evaluations of the greenness of products. *Journal of Marketing*, 79(1), 97–110.
- Granzin, K. L., & Olsen, J. E. (1991). Characterizing Participants in Activities Protecting the Environment: A Focus on Donating, Recycling, and Conservation Behaviors. *Journal of Public Policy & Marketing*, 10(2), 1–27.
- Griskevicius, V., Tybur, J. M., & Van den Bergh, B. (2010). Going Green to Be Seen: Status, Reputation, and Conspicuous Conservation. *Journal of Personality and Social Psychology*, 98(3), 392–404.
- Guercini, S., & Ranfagni, S. (2014). Sustainability and Luxury: The Italian Case of a Supply Chain Based on Native Wools. *Journal of Corporate Citizenship*, 2013(52), 76–89.
- Hamzaoui-Essoussi, L., & Linton, J. D. (2014). Offering branded remanufactured/recycled products: at what price? *Journal of Remanufacturing*, 4(1).
- Haws, K. L., Winterich, K. P., & Naylor, R. W. (2014). Seeing the world through GREEN-tinted glasses: Green consumption values and responses to environmentally friendly products. *Journal of Consumer Psychology*, 24(3), 336–354.
- Hayes, A. F. (2013). Introduction to Mediation, Moderation, and Conditional Process Analysis: A Regression-Based Approach. New York, NY: The Guilford Press. *Journal of Educational Measurement*, 3, 1–39.
- Hazen, B. T., Boone, C. A., Wang, Y., & Khor, K. S. (2017). Perceived quality of remanufactured products: construct and measure development. *Journal of Cleaner Production*, 142(2), 716–726.

- Hood, B. (2016). Make recycled goods covetable. In *Nature* (Vol. 531, Issue 7595, pp. 438–440).
- Im, S., Bhat, S., & Lee, Y. (2015). Consumer perceptions of product creativity, coolness, value and attitude. *Journal of Business Research*, 68(1), 166–172.
- Janssen, C., Vanhamme, J., & Leblanc, S. (2017). Should luxury brands say it out loud? Brand conspicuousness and consumer perceptions of responsible luxury. *Journal of Business Research*, 77, 167–174.
- Janssen, C., Vanhamme, J., Lindgreen, A., & Lefebvre, C. (2014). The Catch-22 of Responsible Luxury: Effects of Luxury Product Characteristics on Consumers' Perception of Fit with Corporate Social Responsibility. *Journal of Business Ethics*, 119(1), 45–57.
- Johnson, C. M., Tariq, A., & Baker, T. L. (2018). From Gucci to Green Bags: Conspicuous Consumption as a signal for pro-social behaviour. *Journal of Marketing Theory and Practice*, 26(4), 339–356.
- Joy, A., Sherry, J. F., Venkatesh, A., Wang, J., & Chan, R. (2012). Fast fashion, sustainability, and the ethical appeal of luxury brands. *Fashion Theory - Journal of Dress Body and Culture*, 16(3), 273–295.
- Kaiser, F. G. (2006). A moral extension of the theory of planned behavior: Norms and anticipated feelings of regret in conservationism. *Personality and Individual Differences*, 41(1), 71–81.
- Kamleitner, B., Thürridl, C., & Martin, B. A. S. (2019). A Cinderella Story: How Past Identity Salience Boosts Demand for Repurposed Products. *Journal of Marketing*, 83(6), 76–92.
- Kapferer, J. N., & Laurent, G. (2016). Where do consumers think luxury begins? A study of perceived minimum price for 21 luxury goods in 7 countries. *Journal of Business Research*, 69(1), 332–340.

- Kapferer, J. N., & Michaut-Denizeau, A. (2014). Is luxury compatible with sustainability
Luxury consumers' viewpoint. *Journal of Brand Management*, 21(1), 1–22.
- Kapferer, J. N., & Michaut-Denizeau, A. (2020). Are millennials really more sensitive to
sustainable luxury? A cross-generational international comparison of sustainability
consciousness when buying luxury. *Journal of Brand Management*, 26, 35–47.
- Keaveney, S. M., Herrmann, A., Befurt, R., & Landwehr, J. R. (2012). The eyes have it: How
a car's face influences consumer categorization and evaluation of product line
extensions. *Psychology and Marketing*, 29(1), 36–51.
- Keith, S., & Silies, M. (2015). New life luxury: upcycled Scottish heritage textiles.
International Journal of Retail and Distribution Management, 43(10/11), 1051–1106.
- Kessous, A., & Valette-Florence, P. (2019). “From Prada to Nada”: Consumers and their
luxury products: A contrast between second-hand and first-hand luxury products.
Journal of Business Research, 102, 313–327.
- Ko, E., Phau, I., & Aiello, G. (2016). Luxury brand strategies and customer experiences:
Contributions to theory and practice. *Journal of Business Research*, 69(12), 5749–5752.
- Louro, M. J., Pieters, R., & Zeelenberg, M. (2005). Negative Returns on Positive Emotions:
The Influence of Pride and Self-Regulatory Goals on Repurchase Decisions. *Journal of
Consumer Research*, 31(4), 833–840.
- Luchs, M. G., Brower, J., & Chitturi, R. (2012). Product choice and the importance of
aesthetic design given the emotion-laden trade-off between sustainability and functional
performance. *Journal of Product Innovation Management*, 29(6), 903–916.
- Luchs, M. G., Naylor, R. W., Irwin, J. R., & Raghunathan, R. (2010). The sustainability
liability: Potential negative effects of ethicality on product preference. *Journal of
Marketing*, 74(5), 18–31.
- Magnier, L., Mugge, R., & Schoormans, J. (2019). Turning ocean garbage into products –

- Consumers' evaluations of products made of recycled ocean plastic. *Journal of Cleaner Production*, 215, 84–98.
- McFerran, B., Aquino, K., & Tracy, J. L. (2014). Evidence for two facets of pride in consumption: Findings from luxury brands. *Journal of Consumer Psychology*, 24(4), 455–471.
- Meng, M. D., & Leary, R. B. (2019). It might be ethical, but I won't buy it: Perceived contamination of, and disgust towards, clothing made from recycled plastic bottles. *Psychology and Marketing*, 1–15.
- Mobley, A. S., Painter, T. S., Untch, E. M., & Rao Unnava, H. (1995). Consumer evaluation of recycled products. *Psychology & Marketing*, 12(3), 165–176.
- Morales, A. C., & Fitzsimons, G. J. (2007). Product contagion: Changing consumer evaluations through physical contact with “disgusting” products. *Journal of Marketing Research*, 44(2), 272–283.
- Mukherjee, A., & Hoyer, W. D. (2001). The Effect of Novel Attributes on Product Evaluation. *Journal of Consumer Research*, 28(3), 462–472.
- Nisbet, E. K., Zelenski, J. M., & Murphy, S. A. (2009). The nature relatedness scale: Linking individuals' connection with nature to environmental concern and behavior. *Environment and Behavior*, 41(5), 715–740.
- Olsen, M. C., Slotegraaf, R. J., & Chandukala, S. R. (2014). Green claims and message frames: How green new products change brand attitude. *Journal of Marketing*, 78(5), 119–137.
- Onwezen, M. C., Antonides, G., & Bartels, J. (2013). The Norm Activation Model: An exploration of the functions of anticipated pride and guilt in pro-environmental behaviour. *Journal of Economic Psychology*, 39, 141–153.
- Park, H. J., & Lin, L. M. (2020). Exploring attitude–behavior gap in sustainable consumption:

- comparison of recycled and upcycled fashion products. *Journal of Business Research*, 117, 623-628.
- Patrick, V. M., Chun, H. E. H., & Macinnis, D. J. (2009). Affective forecasting and self-control: Why anticipating pride wins over anticipating shame in a self-regulation context. *Journal of Consumer Psychology*, 19(3), 537–545.
- Peloza, J., White, K., & Shang, J. (2013). Good and guilt-free: The role of self-accountability in influencing preferences for products with ethical attributes. *Journal of Marketing*, 77(1), 104–119.
- Peter, P. C., & Honea, H. (2012). Targeting social messages with emotions of change: The call for optimism. *Journal of Public Policy and Marketing*, 31(2), 269–283.
- Rao, A. R., Qu, L., & Ruckert, R. W. (1999). Signaling unobservable product quality through a brand ally. *Journal of Marketing Research*, 36(2), 258–268.
- Rodriguez Mosquera, P. M., Manstead, A. S. R., & Fischer, A. H. (2000). The role of honor-related values in the elicitation, experience, and communication of pride, shame, and anger: Spain and the Netherlands compared. *Personality and Social Psychology Bulletin*, 26(7), 833–844.
- Roseman, I. J. (1991). Appraisal Determinants of Discrete Emotions. *Cognition and Emotion*, 5(3), 161–200.
- Rucker, M. (2009). Consumer perceptions of recycled textile fibers. In *Sustainable Textiles: Life Cycle and Environmental Impact* (pp. 203–213). Elsevier Inc.
- Sandin, G., & Peters, G. M. (2018). Environmental impact of textile reuse and recycling – A review. *Journal of Cleaner Production*, 184, 353–365.
- Schemken, M., & Berghaus, B. (2018). The relevance of sustainability in luxury from the millennials' point of view. In *Environmental Footprints and Eco-Design of Products and Processes* (pp. 103–130).

- Schneider, C. R., Zaval, L., Weber, E. U., & Markowitz, E. M. (2017). The influence of anticipated pride and guilt on pro-environmental decision making. *PLoS ONE*, *12*(11), 1–14.
- Schultz, P. W. (2000). Empathizing with nature: The effects of perspective talking on concern for environmental issues. *Journal of Social Issues*, *56*(3), 391–406.
- Sen, S., & Bhattacharya, C. B. (2001). Does doing good always lead to doing better? Consumer reactions to corporate social responsibility. *Journal of Marketing Research*, *38*(2), 225–243.
- Seo, Y., Buchanan-Oliver, M., & Cruz, A. G. B. (2015). Luxury brand markets as confluences of multiple cultural beliefs. *International Marketing Review*, *32*(2), 141–159.
- Simmons, C. J., & Becker-Olsen, K. L. (2006). Achieving Marketing Objectives Through Social Sponsorships. *Journal of Marketing*, *70*(4), 154–169.
- Steenhaut, S., & Van Kenhove, P. (2006). The mediating role of anticipated guilt in consumers' ethical decision-making. *Journal of Business Ethics*, *69*(3), 269–288.
- Theotokis, A., & Manganari, E. (2015). The Impact of Choice Architecture on Sustainable Consumer Behavior: The Role of Guilt. *Journal of Business Ethics*, *131*(2), 423–437.
- Torelli, C. J., Monga, A. B., & Kaikati, A. M. (2012). Doing Poorly by Doing Good: Corporate Social Responsibility and Brand Concepts. *Journal of Consumer Research*, *38*(5), 948–963.
- Tracy, J. L., & Robins, R. W. (2007). The psychological structure of pride: A tale of two facets. *Journal of Personality and Social Psychology*, *92*(3), 506–525.
- Trimble, C. S., & Rifon, N. J. (2006). Consumer perceptions of compatibility in cause-related marketing messages. *International Journal of Nonprofit and Voluntary Sector Marketing*, *11*(1), 29–47.
- Trudel, R., & Argo, J. J. (2013). The Effect of Product Size and Form Distortion on Consumer

- Recycling Behavior. *Journal of Consumer Research*, 40(4), 632–643.
- Turunen, L. L. M., Cervellon, M. C., & Carey, L. D. (2020). Selling second-hand luxury: Empowerment and enactment of social roles. *Journal of Business Research*, 116, 474–481.
- Unilever. (2017, January 1). *Report shows a third of consumers prefer sustainable brands*. <https://www.unilever.com/news/Press-releases/2017/report-shows-a-third-ofconsumers-prefer-sustainable-brands.html>. Retrieved January 13, 2019
- Van der Schalk, J., Bruder, M., & Manstead, A. (2012). Regulating emotion in the context of interpersonal decisions: The role of anticipated pride and regret. *Frontiers in Psychology*, 3, 513.
- Weiner, B. (1986). *An attributional theory of motivation and emotion*. (1st ed.) . New York, USA: Springer-Verlag
- White, K., Habib, R., & Hardisty, D. J. (2019). How to SHIFT consumer behaviors to be more sustainable: A literature review and guiding framework. *Journal of Marketing*, 83(3), 22–49.
- Wiedmann, K. P., & Hennigs, N. (2013). *Luxury marketing: A challenge for theory and practice*. (1st ed.) Wiesbaden, Germany: Springer Gabler.
- Williams, L. A., & DeSteno, D. (2008). Pride and Perseverance: The Motivational Role of Pride. *Journal of Personality and Social Psychology*, 94(6), 1007–1017.
- Wilson, M. (2016). When creative consumers go green: understanding consumer upcycling. *Journal of Product and Brand Management*, 25(4), 394–399.
- Winterich, K. P., Nenkov, G. Y., & Gonzales, G. E. (2019). Knowing What It Makes: How Product Transformation Salience Increases Recycling. *Journal of Marketing*, 83(4), 21–37.
- Yoo, B., & Donthu, N. (2001). Developing and validating a multidimensional consumer-

based brand equity scale. *Journal of Business Research*, 52(1), 1–14.

Yoo, F., Jung, H.J., & Oh, K.W. (2021) Motivators and Barriers for Buying Intention of Upcycled Fashion Products in China. *Sustainability*, 13, 2584

Yu, S., & Lee, J. (2019). The effects of consumers' perceived values on intention to purchase upcycled products. *Sustainability (Switzerland)*, 11(4).