

Frugal Consumer and the 3R Model of Consumption

by

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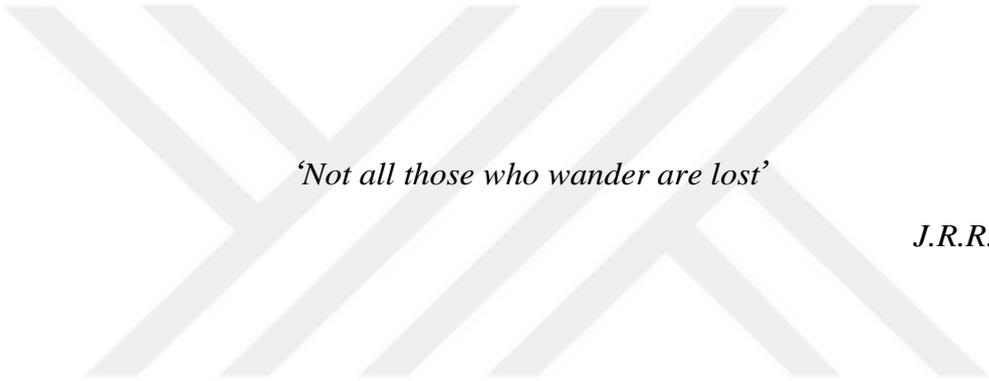
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'Not all those who wander are lost'

J.R.R. Tolkien

ABSTRACT

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In the face of unsustainable rate of waste generation, the 3R (reduce, reuse, recycle) model of consumption are getting attention from companies, public policy makers and academics. Despite the growing interest at sustainability, there is still little evidence on it from the perspective of consumers. Overall, this dissertation consists of two essays which contribute to the understanding of sustainable consumer behavior.

First essay explores the relationship between frugality and the 3R model of consumption. Previous literature conceptualizes frugality as a unidimensional consumer trait, and different operationalizations exist. This essay distinguishes frugality from conceptually related constructs such as thriftiness, price consciousness, value consciousness, voluntary simplicity, and environmental consciousness. Bringing diverse conceptualizations and operationalizations of frugality together, then, it argues that frugality consists of two distinct dimensions: spending-related frugality and consumption-related frugality. Through a disaggregated perspective, the relationship between the distinct dimensions of frugality and the 3R model of consumption is investigated. Findings show that consumption-related frugality is positively correlated with the 3R strategies of consumer behavior while spending-related frugality has no correlation with these. Essay 1 sheds light on the contradictory findings in previous research, and suggests that branding initiatives and public policies on sustainability can be more powerful if they appeal to consumption-related frugality as a consumer trait. It is co-authored by Zeynep Gurhan-Canli and Ceren Hayran Sanli.

Second essay explores the preowned luxury market. The market for luxury products has been changing due to economic conditions and digital transformation. One of the luxury branding strategies for enhanced sustainability and waste reduction is the preowned luxury, yet, such a strategy also allows access to high-end luxury products. This essay provides insights into the spillover effects of the preowned market on luxury customers' brand attachment. Findings show that the preowned market does not decrease existing customers' brand attachment and this is due to the type of the products available in the preowned market. Customers' brand attachment decreases when recent (vs. older) season products are available in the preowned market. Findings also suggest that the preowned market can actually benefit luxury brands. Customers' brand attachment increases with a sustainability (vs. affordability) appeal. The effect mediated by customers' ideal self concept connection. The essay is co-authored by Vanitha Swaminathan and Zeynep Gurhan-Canli.

ÖZETÇE

Tutumlu Tüketici ve 3R Tüketim Modeli

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Surdurulebilirliği gün geçtikçe zorlaşan atık yönetimi, araştırmacıların, kamu politikaları düzenleyen kurumların ve şirketlerin ilgisini kısaca 3R (reduce, reuse, recycle -azalt, yeniden kullan, geri donustur) olarak bilinen üretim ve tüketim modeline yöneltmiştir. Surdurulebilirlik konusuna gösterilen ilginin artmasına rağmen, pazarlama literatürü tüketici perspektifinden veri sağlamak konusunda yetersiz kalmaktadır. Söz konusu tez, literatürdeki bu acığı kapamaya katkı sağlamaktadır.

Birinci bölüm, tutumluluğun boyutları ve bu boyutların 3R tüketim modeli ile ilişkisini incelemektedir. Hali hazırda pazarlama literatürü, tutumluluğu bir tüketici özelliği olarak tek boyutlu halde tanımlamaktadır. Birinci bölüm, tutumluluğun aslında birbirinden ayrı iki boyutu olduğunu ve satın alma sürecinde gösterilen tutumluluğun değil, tüketim sürecinde gösterilen tutumluluğun 3R modeli tüketici davranışları ile pozitif ilişkisi olduğunu göstermiştir.

İkinci bölüm, tutumlu tüketici davranışının spesifik bir örneği olan ikinci el lüks ürün pazarını incelemektedir. Elde edilen bulgulara göre, ikinci el pazar, lüks markaların sekinlik ve ayrıcalıklı olma temeline dayanan marka imajına ve dolayısıyla hali hazırdaki müşterilerinin marka bağlılığına zarar vermemektedir. Fakat bu, ancak ikinci el pazarda ulaşılabilir olan lüks ürünlerin eski sezonlardan olması ile sağlanabilmektedir. Ayrıca, lüks markalar ikinci el pazarının dinamiklerini doğru yöneterek var olan müşteri bağlılığını artırabilmektedir. Ucuz fiyat başlığı yerine sürdürülebilirlik başlığı ile bu ürünleri duyurmak, müşterilerin marka bağlılığının artmasını sağlamaktadır. Bunun sebebi ise, sürdürülebilirlik başlığı ile yapılan tanıtımların, müşterilerin marka ile kurduğu ideal özbenlik bağlantısını güçlendirmesine dayanmaktadır.

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ABBREVIATIONS

CRF	Consumption-related Frugality
OECD	Organisation for Economic Co-operation and Development
SRF	Spending-related Frugality
UNDP	United Nations Development Programme



Chapter 1

INTRODUCTION

Rampant consumption is widely encouraged nowadays. To motivate purchasing, marketing communications frequently bombard consumers with messages such as “buy now, pay later”; “buy two, pay one”; “eat as much as you like”; and “upgrade your choice.” Overconsumption occurs almost in any area including food, clothing, and digital devices (Frick et al., 2020; Wilson et al., 2021). Reflected by the mounting research and media attention, concern about the negative effects of overconsumption on consumers’ budgets and environmental resources is increasing (Fook and McNeill 2020; Frost, 2020). As a consequence, new social norms and governmental practices are emerging. International organizations such as the Organisation for Economic Co-operation and Development (OECD) and United Nations Development Programme (UNDP) have prioritized sustainability agendas, contributing to the renewed interest in frugal consumer behavior. For example, the UNDP 2030 Agenda for Sustainable Development acknowledges that fundamental reduction in spending and consumption is necessary to achieve financial and environmental sustainability in the long run (United Nations, 2015). A shift to a consumption model that relies on the “reduce, reuse, recycle” (3R) paradigm is highly encouraged (OECD, 2018; Rosane, 2021). The United Nations Environment Programme (2017) identifies eco-design, repairing, refurbishment, and reuse of products among its high-priority development goals.

From a managerial perspective, these trends drive corporations to prioritize environmentally and economically responsible initiatives, radically shaping their business practices. Today’s companies are putting emphasis on sustainability efforts more than ever (Harker, 2020; Sownie, 2020; YEC, 2018). For example, Evian (2021) plans by 2025 to produce all plastic bottles from recycled material. PepsiCo (2020) is committed to having all packaging made of recyclable or compostable material by 2025 and has pledged \$65 million in partnership initiatives to boost recycling rates. Similarly, iPhone follows a zero-waste strategy by recovering materials from old products (Apple, 2020).

1.1 Motivation

Overall, degrading natural resources, worsening social and economic conditions as well as the global COVID-19 pandemic have further highlighted the importance of sustainable development and accelerated the adoption of related practices for companies, government entities, and individual consumers.

3R (reduce, reuse, recycle) strategies in consumption has an important role in promoting sustainability in the marketplace. Reducing strategies refer to the practices that prompt careful use of resources in order to reduce waste generation. Reusing strategies refer to the practices that prompt reuse of resources, materials, or products to the degree that they are fully or partly usable and beneficial to the user or the producer. Recycling strategies refer to the practices that prompt the disposition of materials in a way that the waste can be used as input or resource in further production. Overall, the 3R principle aims to minimize resource use and waste generation by efficiently and effectively using materials in both consumption and production. The 3R principle was first discussed upon and motivated in 2005 by the G8 (Group of Eight) countries including European Union, United States, Canada, Japan and Russia (United Nations Center for Regional Development, 2012). While the 3R principle in production significantly contributes to sustainability as well, our focus in this dissertation is on individual consumer behavior that follows the 3R principle in consumption. Such behaviors include secondhand consumption, repairing, reusing, multi-purpose use of products, donation of unused items, and purchase products made from recyclable materials and their disposition accordingly (Minelgaitė and Liobikienė, 2019; Pandey, Surjan and Kapshe, 2018; Yang, Zhou and Xu, 2014).

The factors contributing to consumers' engagement in the 3R principle have been investigated and classified into two by previous research: external factors such that; public initiatives create awareness on sustainability and they motivate consumers to behave in more environmentally-friendly ways (Porat et al., 2020), physical and social conditions such as the closeness of donation boxes or the number of neighbors recycling decrease the amount of trashing (Bortoleto, 2014), and internal factors such that; altruistic goals motivate green purchase intentions (Panda et al., 2020), environmental awareness and a concern for community increase behaviors towards waste reduction (Rustam, Wang and Zaamer, 2020; Tonglet, Phillips and Bates, 2004), and frugality as a personality trait is positively related to environmentally-friendly behavior such as recycling and sharing (Rao, 2013).

This dissertation examines frugality as one of the factors that contribute to consumers' engagement in the 3R consumption behavior. Frugality is defined as "a unidimensional

lifestyle trait characterized by the degree to which consumers are both restrained in acquiring and in resourcefully using economic goods and services to achieve longer-term goals” (Lastovicka et al., 1999, p. 88). It has been shown to be one of the consumer traits that motivate the 3R consumption behavior alongside other traits such as environmentally consciousness and voluntary simplicity (Thøgersen, 2018; Evans, 2011; Zavestoski, 2002).

Frugal consumer trends are now rising such as avoiding excessive consumption, engaging in value-driven smart shopping, repairing and reusing products, partaking in the sharing economy, and pressuring companies to adopt sustainable practices. Frugal consumers reduce resource use not only by avoiding unnecessary spending at the pre-purchase stage (e.g., Lee, 2016; Nepomuceno and Laroche, 2015; Pan et al., 2019) but also by resourcefully using products at the post-purchase stage, such as repairing, reusing and recycling (e.g., Evers et al., 2018; Lastovicka et al., 1999; Wang et al., 2021). Despite academics’ growing interest in the relationship between frugality and the 3R consumption behavior, there is not much evidence on it. The literature provides limited insights for when, how and why individual consumers engage in sustainable behavior, especially following the 3R strategies, and the extent to which frugality as a consumer trait contributes to it.

This dissertation elaborates on the 3R model of consumption. The first essay looks at frugality as a consumer trait, and speculates that it has in fact two dimensions. Then it provides a bidimensional measurement of frugality, and examine the relationship between the dimension of frugality and consumers’ tendency to engage in behaviors such as secondhand (preowned) consumption, donation, reusing, repairing and recycling. This essay aims to shed on the contradictory findings shown in previous research, especially whether frugality as a consumer trait has a positive relationship with the 3R model of consumption, and if yes, when and how.

The second essay examines a specific case of the 3R consumption behavior from a different, yet complementary perspective. Besides consumers’ trait attributes, Trudel (2019) argues that social norms and, more specifically, how others perceive sustainable behaviors affects consumers’ willingness to engage in such behaviors. Perception of others, whether a specific act is accepted in the society and not stigmatized, affects individuals’ attitudes and decisions even more strongly than their personality traits (Onorato and Turner, 2004). The second essay elaborates on how the 3R consumption behavior is perceived by others and why. It looks at a specific case, the preowned luxury market, and examines how the preowned luxury is perceived by the customers of brand-new luxury products. The preowned luxury market is one of the most interesting venues to investigate how a specific

type of the 3R behavior is perceived, because, in this market, sustainability comes with a cost for luxury brands as well as luxury customers: reduced exclusivity. For non-luxury brands, involvement in sustainability and following the 3R principles do not necessarily come with a cost, and there is not always a reason to stigmatize such behaviors. However, what happens when there is a reason, such as reduced exclusivity in the case of the preowned luxury market? How do luxury consumers' brand perception change when the brand sacrifices one of its most desired attributes in exchange for sustainability? The second essay sheds light on this question.

The dissertation concludes with a general discussion of theoretical and practical implications of the two essays as well as future research venues.



Chapter 2

DIMENSIONS OF FRUGALITY: Differential Relationships to the 3R Model of Consumption

While frugal practices date back to the earliest periods of life and despite their increasing importance, consumer behavior research has largely neglected them. Following the suggestions of Lastovicka et al. (1999), we elaborate that understanding and measuring frugality is crucial in consumer behavior for two reasons. First, research on frugality has mostly focused on the pre-purchase stages of consumption, such as decision-making processes, or the post-purchase stages, such as product evaluation or word of mouth. However, a study on frugality should shed light on consumer behavior at all stages of purchase and consumption. Second, research has conceptualized frugality in inconsistent ways, either as financial prudence or as waste avoidance, which leads to confusion on how it manifests in consumption. Thus, a clear conceptualization and measurement of frugality is needed.

Accordingly, Chapter 2 aims to move the discussion of frugality beyond the integration of diverse definitions and practices and to provide a theoretical structure that can be empirically tested and employed for making future predictions. This theoretical exercise focuses on the relationships between constitutive aspects of frugality and their manifestations in particular consumption domains. The contribution of this research is twofold. First, we argue that frugality as a consumer trait consists of two distinct dimensions. We develop a bidimensional scale of frugality and provide empirical evidence for these distinct dimensions as well as their convergent and divergent validities from the conceptually related constructs price consciousness and value consciousness. Second, we investigate the relationship of these dimensions with 3R consumption strategies such as secondhand consumption, repairing, reusing, donation, and recycling. We also shed light on the contradictory findings in the literature.

In the following section, we discuss the historical origins of frugality. Then, we elaborate on the differences between frugality and conceptually related constructs. We present findings from previous research that hint at the bidimensional nature of frugality. Finally, we develop a bidimensional scale of frugality, measure the validity and reliability of the

subscales, and empirically show how the dimensions relate to consumer behavior that follows the 3R strategies.

2.1 *Origins of Frugality*

The etymological roots of the word “frugality” come from the Latin word *frugalitas* meaning “virtue” (Bove et al., 2009). It is first defined by DeYoung (1986: 285) as “*careful use of resources and avoidance of waste*”, and it is usually conceptualized as opposed to consumption (Gronow and Warde, 2001). Later, Lastovicka et al. (1999) conceptualized it as being restrained in spending and consuming.

The earliest discussions of frugality date back to the emergence of culture and religious doctrines (Durning, 1992). The Amish, for example, are considered the most frugal society (Goldsmith et al., 2014). Buddhism highlights the denunciation of possessions as a must in the process of spiritual evolution (Masson, 1976), and avoiding excessive consumption is a key to concept in Christian ethic (Todd and Lawson, 2003; Heilbroner, 1962). It is deemed as necessary to preserve financial resources, take care of possessions, and even to “sacrifice excess goods for the common good” (Nash, 2007: 2). Bible includes five times more content related to money and possessions than to prayer (Fisher, 1976). The climate is no different in Jewish culture as one of their famous proverb goes “give me neither poverty nor riches.” (Lastovicka et.al., 1999).

Apart from religious ethics, politics and economics have also played significant roles in shaping frugal consumer behavior (Evans, 2011; Wilk and Cliggett, 2009). During the 18th century, the U.S. government encouraged frugality as the major consumption orientation (Morgan, 1967; Witkowski, 1989), with the aim to reduce public demand for imported luxury items (Heilbroner and Milberg, 2012). In the 19th century, John Stuart Mill established the theory of capital (Lastovicka et al., 1999). In his theory, Mill (1848, 1999) argued that capital can only be accumulated by frugal consumers who prefer future gains to immediate ones.

Despite the institutional attempts to motivate frugal consumption, the Industrial Revolution, advancements in marketing, and evolving cultural norms led to a pause in the interest in frugality. Consumers were then able to enjoy the reduced costs of consumption due to mass production. Approximately 100 years later, however, frugality has again become prominent as societies face the severe financial and environmental damages of overconsumption (Birkner, 2013; Egol et al., 2010). For example, the New York Times writer Elliott (2010) observed that Americans have started to become savers rather than

spenders even in Valentines' Day since the start of the recession. In the same line, Stillerman's (2012) research speculates that frugal consumption is triggered mostly by consumer's financial difficulties. During World War II, the U.S. government run campaigns preaching frugality to consumers. Overall, scarcity in production and consumption is one of the situational triggers of frugality and frugal consumer behavior (Witkowski, 2003).

Although frugality, being restrained in spending and consuming, has been investigated in relation to culture, ethics, religious doctrines, war times or financial difficulties, other streams of research also suggest that frugality is not necessarily motivated only by such factors. For example, Belk (1983) argues that capitalist cultures encourage acquisitiveness and possessiveness of goods and services, yet this does not always generate the expected ends such as well-being and enhanced social relations. Consumers receive both financial and psychological benefits from limiting their consumption, too (Sherry, 1990). While motivations and benefits of restraining consumption may sometimes be purely ideological such as anti-consumerism, consumers may sometimes choose to limit consumption for a particular period of time, which then enables them to fulfill their long-term goals (Belk, Ger, and Askegaard, 2003).

Apart from the constraint of consumption for the sake of long-term goals, decreased marginal utility of consumption also contributes to the slow-down of spending and consumption. After it reaches saturation, consumption adds little to consumer's satisfaction of needs and desires. Although American's monetary income has doubled since 1960s, there has not been observed any significant change in consumers' level of happiness. More strikingly, consumers have reported impaired quality of life due to increasing social competition, higher thresholds for the satisfaction of psychological needs through consumption and of course financial debts (Csikszentmihalyi, 2000).

2.2 Conceptually related Constructs

What is a conventional stereotype of frugal consumer? A penny-pincher or a cheapskate? Early academic research often confused frugality with penny-pinching, thriftiness, and being a cheapskate (e.g., Lastovicka et al., 1999; Podkalicka and Potts, 2014). However, other research streams used frugality almost as a synonym for environmental consciousness, waste avoidance, or anti-consumerism (e.g., De Young, 1986; Evans, 2011; Rao, 2013). To shed light on these conflicting conceptualizations, we elaborate on the similarities to and differences between frugality and the other constructs such as environmental consciousness, thriftiness or voluntary simplicity.

2.2.1 *Thriftiness*

Thriftiness involves consuming more with less money (Evans, 2011) and stems from the pain of paying combined with a motivation to consume more (Rick et al., 2008). Thrifty consumers are motivated by the thrill of a good bargain, which leads to an effort to pay the least amount of money for consumption. By contrast, frugality is about being careful in spending and consuming and is not necessarily driven by money-saving motivations (De Young, 1986). Relatedly, Rick et al. (2008) show that thrifty consumers are twice as likely to feel the pain of paying than frugal consumers. Another aspect that differentiates thrifty from frugal consumers is that, unlike thriftiness, frugality does not result from a perceived deprivation of resources (Evans, 2011). Moreover, thrifty consumers are not particularly willing to focus on the quality-related attributes of the goods or services purchased as long as they are reasonably cheap (Rick et al., 2008). For example, thrifty consumers may purchase cheap food with beyond-use dates or visit charities to obtain free clothes they do not need (Miller, 2001; Wilk, 2001).

2.2.2 *Price Consciousness*

Price consciousness refers to the degree to which price of goods and services has a role in customers' purchase decisions (Lichtenstein et al., 1995). Price-conscious consumers respond positively to sales and constantly seek cheaper options. They obtain emotional value and enjoyment from attaining the best prices. Indeed, price consciousness usually leads to a preference for lower prices at the expense of other product attributes such as quality (Alford and Biswas, 2002). Consumers' frugality levels are predictive of the degree to which they are price conscious (Inglehart, 1990; Shoham and Brencic, 2004; Sinha and Batra, 1999). In general, frugal consumers are more affected by price differences compared to non-frugal consumers (Pettit et al., 1985; Rose et al., 2010).

2.2.3 *Propensity to Plan Spending*

Propensity to plan spending is another construct related to frugality. Research shows that frugal consumers often plan how they spend money (Lynch et al., 2010). Frugality drives self-regulated consumption behavior (Bove et al., 2009), and frugal consumers acquire psychological benefits from ownership of a higher-priced product less than their non-frugal counterparts. Frugal consumers tend to be better at setting goals and sticking to them with ambition, capability, and a sense of responsibility (Todd and Lawson, 2003). They plan their shopping only on sale days (Bardhi and Arnould, 2005) and do compulsive buying less due

to their orientation towards long-term goals instead of short-term gratifications (Bearden et al., 2006). Putting it differently, frugal consumers can easily control their spending (Goldsmith et al., 2014). Frugal consumer behavior is usually sustained insofar as consumers can act in self-reliant and self-controlled ways (Gould et al., 1997; Nepomuceno and Laroche, 2017). These findings support the positive relationship between frugality and planning and monitoring how money is spent; however, planning is not sufficient to engage in frugal consumer behavior. Therefore, we argue that frugality and propensity to plan spending are positively related but distinct constructs.

2.2.4 Value Consciousness

Value consciousness reflects an urge to balance paying low prices and receiving a certain level of quality (Lichtenstein et al., 1990). It fosters a concern about acquisition utility, and good deals motivate consumers with high value consciousness in their purchases (Lichtenstein et al., 1993). Depicting high self-regulative concerns combined with lower preference for increasingly more goods (Harnish and Roster, 2019), frugal consumers are generally more value conscious than non-frugal ones (Lastovicka et al., 1999). Basing their arguments on self-perception theory, Shoham and Brencic (2004) also suggest that value consciousness can serve to infer frugality traits. Therefore, we argue that value consciousness and frugality are distinct traits, yet they are expected to be positively related.

2.2.5 Deal Proneness

Deal proneness reflects a tendency towards an increased purchase likelihood due to the deals offered (Lichtenstein et al., 1990). Consumer with high deal proneness find bargain shopping a pleasurable activity. They enjoy shopping when they end up with a good deal (Bardhi, 2003; Schindler, 1989). Similarly, frugal consumers like to follow sales, seek where and when best to buy products, or make bargains with sellers (Podkalicka and Potts, 2014). They tend to purchase products whenever there is a good deal, thinking that there will come a time for their use (Bardhi and Arnould, 2005), and they take pride in paying less than the regular price (Tatzel, 2002). Nevertheless, frugality indicates a different trait, as non-frugal consumers necessarily purchase during sales, causing them to overspend (Lastovicka et al., 1999). Therefore, deal proneness and frugality are distinct but positively correlated constructs.

2.2.6 *Voluntary Simplicity*

Voluntary simplicity refers to a total of ideas suggesting that one can derive fulfillment more, if not only, from non-material sources than the acquisition of material things (Zavestoski, 2002). Voluntary simplicity urges consumers to limit consumption to focus on non-materialistic sources for happiness (Ballantine and Creery, 2010; Etzioni, 1999). In voluntary simplicity, reaching personal growth is the main motivation. In a first study conducted on voluntary simplicity, Leonard-Barton (1981) shows that voluntary simplifiers choose this lifestyle out of personal conviction, ideology, and spirituality. They question consumerism and the worth of material growth. By contrast, frugality is related to a simpler lifestyle only in terms of controlled spending and consuming, without end goals such as personal growth and the pursuit of an ideology that is evident in voluntary simplicity. Bove et al. (2009) suggest that voluntary simplicity and frugality differ in terms of one's motivations, such that voluntary-simplistic consumers are guided by life satisfaction and self-determination while frugal consumers are guided by market mavenism. Frugal consumers tend to be financially prudent and waste avoidant; however, they do not necessarily engage in cultivation of non-materialistic values. Therefore, frugality is a different construct from voluntary simplicity.

2.2.7 *Environmental Consciousness*

Environmental consciousness reflects a concern towards environment (Lin and Chang, 2012). This construct covers a range of practices that can be considered frugal, and previous research shows a positive correlation between frugality and environmental consciousness. For example, Corral-Verdugo et al. (2011) categorize frugal, environmentally conscious, and altruistic consumer behavior together under the umbrella of sustainable behavior. Frugality is considered one of the traits that motivate consumers to sacrifice personal benefits to protect the environment (Evans, 2011). However, despite a positive correlation, frugality does not always guarantee environmentally conscious behavior or concern for sustainability (Alcott, 2008) and therefore is a different construct. For example, unlike frugal consumers, environmentally conscious consumers may leave their purchased products unused or engage in overconsumption (Lin and Chang, 2012).

See table 2.1 for a brief list of some daily life differences between a consumer who scores high on frugality or other traits.

Table 2.1 Conceptual differences in daily life examples.

<p>Frugal Consumer: searches for a cheap price, once on the table eats every piece of the chicken, and feeds stray cats with leftovers.</p> <p>Thrifty Consumer: tries to catch a chicken or even two alive walking freely on a field, cuts and cooks them.</p> <p>Environmentally-conscious Consumer: pays a price premium for an organic chicken and spends time to throw its plastic package into the recycle bin.</p> <p>Value-conscious Consumer: makes bargain with the seller and buys a big fresh chicken for a cheaper price.</p> <p>Voluntary Simplifier: Why would she need to eat a fancy chicken at all? Rice is simply enough to feed herself.</p>

2.3 Dimensions of Frugality

Lastovicka et al. (1999) initially identified frugality as a unidimensional consumer trait and developed a scale for its measurement (see Table 2.2 for scale items). However, subsequent research presented a diversified understanding of frugality, and scales were not elaborate enough to account for the distinct dimensions of frugality. Specifically, as noted previously, studies have conceptualized frugality differently, either as spending-related (e.g., Lastovicka et al., 1999; Lee, 2016; Podkalicka and Potts, 2014) or as consumption-related (e.g., Alcott, 2008; Evans, 2011; Pepper, Jackson, and Uzzell, 2009). A research stream also theoretically discusses both dimensions but, in the end, provides implications for spending-related dimension (e.g., Lee 2016; Goldsmith et al., 2014) or consumption-related dimension of frugality (e.g., Bove et al., 2009; Evans, 2011). In addition, studies have used the concept of thriftiness but operationalized it as spending-related frugality (e.g., Chancellor and Lyubomirsky, 2014; Nicol, 2009; Bardhi and Arnould, 2005).

Table 2.2 Frugality scale items (Lastovicka et al., 1999).

1. If you take good care of your possessions, you will definitely save money in the long run.
2. There are many things that are normally thrown away that are still quite useful.
3. Making better use of my resources makes me feel good.
4. If you can re-use an item you already have, there's no sense in buying something new.
5. I believe in being careful in how I spend my money.
6. I discipline myself to get the most from my money.
7. I am willing to wait on a purchase I want so that I can save money.
8. There are things I resist buying today so I can save for tomorrow.

Diverse conceptualizations of frugality have thus led to contradictory findings. For example, research conceptualizing frugality as consumption-related finds that frugality is positively linked to proenvironmental behavior, such as repair, reuse, and recycle (e.g., Awais et al., 2020; Suárez et al., 2020; Evers et al., 2018; Tapia-Fonllem et al., 2013; Evans, 2011; De Young, 1986). However, research conceptualizing frugality as spending-related shows that frugality and proenvironmental behavior are not significantly related (e.g., Touchette and Nepomuceno, 2020; Kropfeld et al., 2018). The case is similar for consumers' spending patterns. Bargain hunting for a low price is considered a practice of frugality (e.g., Podkalicka and Potts, 2014), but frugal consumers are also willing to bear the cost of donation such as spending time, driving to the exact places to donate (Evans, 2011), and paying a price premium for environmentally friendly products (Pepper, Jackson, and Uzzell, 2009). In their recent study, Wang et al. (2021) also show that frugality negatively affects green purchase intentions because it motivates consumers to save rather than to make relatively expensive purchases. To our knowledge, Thøgersen (2018) provides the only evidence of the role of frugality when environmental consciousness is controlled for in data analyses. His results show that frugal consumers do not engage in proenvironmental behaviors unless they have an environmental identity.

Another inconsistent finding is in the relationship between frugality and materialism. Materialism is the extent of importance attached to the possession of goods and services (Belk, 1985). Research has treated it as the opposite of frugality or at least negatively correlated with it (e.g., Lastovicka et al., 1999; Goldsmith and Flynn, 2015; Pepper, Jahson, and Uzzell, 2009). However, other streams of research argue that the relationship between frugality and materialism is not straightforward, as consumer might be both frugal and materialistic at the same time, and non-materialistic consumers do not always score high on the frugality scale (e.g., Lastovicka, 2006; Tatzel, 2002). Goldsmith et al. (2014) speculate that the reason for these inconsistent findings might be due to sample differences such as respondents' age. Sung (2017) suggests that the root of the inconsistent findings lies in the understanding of the constructs, with materialism related to the possession of goods and frugality to the acquisition process of those goods. We posit that the inconsistent findings regarding the relationship between materialism and frugality as well as those regarding proenvironmental behaviors stem from the same source: diverse conceptualizations of frugality. Evers et al. (2018) suggest that the multifaceted nature of frugality awaits future research, especially on product end-use consumption behavior.

In this research, we place proenvironmental product end-use consumption behavior under the umbrella of the 3R model. We acknowledge the multifaceted nature of frugality and aim to integrate the diverse understandings of it into our conceptualization.

Drawing on the insights derived from previous research, we argue that the literature has conceptualized frugality in two ways: spending-related and consumption-related. To account for cases in which proenvironmental behaviors also help in saving money, we follow a similar procedure to Thøgersen's (2018) and keep the costs of all consumer behavior constant regardless of the degree of their environmental friendliness.

Table 2.3 presents a brief list of the highly cited research papers in marketing literature that use different operationalizations of frugality and their findings regarding the relationship between frugality and the related constructs and outcome behaviors. Next, we elaborate on these two specific dimensions and explore them empirically.

Table 2.3 Different operationalizations of frugality in literature.

Authors	Frugality operationalization	Positive relationships with
De Young (1986)	Consumption-related	Environmental consciousness
Lastovicka et al. (1999)	Spending-related	Price consciousness, age, ecocentrism
Witkowski (2003)	Consumption-related	Homemade production
Todd and Lawson (2003)	Spending-related and Consumption-related	Self-control, environmental consciousness
Sung (2017)	Spending-related and Consumption-related	Materialism
Bardhi and Arnould (2005)	Spending-related	Goal engagement, bargain-hunting, recreational shopping
Wang et al. (2021)	Spending-related	Proenvironmental behavior, motivation to save
Bove et al. (2009)	Consumption-related	Market mavenism, shopping antipathy, age
Evans (2011)	Consumption-related	Environmental consciousness
Lee (2016)	Spending-related	Social influence on spending
Rao (2013)	Spending-related and Consumption-related	Environmental consciousness, simply lifestyle
Podkalicka and Potts (2014)	Spending-related	Deal proneness, higher amount of consumption
Goldsmith et al. (2014)	Spending-related	Price consciousness, self-control
Pan et al. (2019)	Spending-related	Price consciousness, motivation to save

2.3.1 *Spending-related Frugality*

Spending-related frugality (SRF) refers to the careful use of money. We can define it as an attempt to carefully use economic resources for further and better acts of spending. Frugality covers practices in which consumers try to spend their money carefully, such as by searching for bargains and sales and for cheaper prices. Previous research exploring SRF suggests that frugal consumers are price conscious (e.g., Lastovicka et al., 1999; Rao, 2013; Shoham and Brencic, 2004), are goal-oriented (Bardhi and Arnould, 2005; Lastovicka et al., 1999), have high self-control (Goldsmith et al., 2014; Todd and Lawson, 2003), and are market mavens with a high interest in recreational shopping and bargain-hunting (Bardhi and Arnould, 2005; Bove et al., 2009; Podkalicka and Potts, 2014). Importantly, SRF is different from thriftiness and money-saving. While tightwads avoid spending money to avoid the pain of paying (Rick et al., 2008), frugal consumers enjoy spending money insofar as they deem it necessary (Bardhi and Arnould, 2005).

2.3.2 *Consumption-related Frugality*

Consumption-related frugality (CRF) reflects the careful use of goods, and we define it as an attempt to carefully use goods and services for further and better acts of consumption. It covers practices such as using one's possessions cautiously and to the fullest (e.g., using a bottle of shampoo until the last drop, repairing and reusing items, recycling materials). Previous research examining CRF suggests that frugal consumers are environmentally conscious (e.g., De Young, 1986; Rao, 2013), goal-oriented (Evans, 2011; Witkowski, 2003), and highly creative in crafting and homemade production (Witkowski, 2003). However, they are not impulsive and do not engage in recreational shopping or bargain-hunting (Rao, 2013). According to Lastovicka (2009), frugal consumers can easily come up with novel ideas to use their products to the fullest. For example, these consumers may add water to almost-empty shampoo bottles or attempt to repair and reuse their products as much as they can (Albinsson et al., 2010).

To understand and empirically depict the distinction of the proposed dimensions, we developed and validated a bidimensional scale of frugality. Given our hypothesis of the existence of the two dimensions of frugality, we investigate a two-factor correlated measurement model.

2.4 Development and Validation of Bidimensional Scale

2.4.1 Study 1: Item Generation

Although surveys and experimental methods provide fruitful insights, they fail to provide space to respondents to further elaborate on their responses or decisions, which of specific importance when generating new research ideas, trying to understand the reasons of contradictory findings in literature, or developing new scales (Mack et al., 2005). In order to create an initial pool of items, we aimed to start with semi-structured interviews for “opening up what is inside respondents” (Mikkelsen, 2005: 341). Research on qualitative data collection suggests that a minimum of 6 to 10 interviews is necessary, however the upper limit depends on the saturation point where interviews no longer provide new insights (Marshall et al., 2013; Bryman, 2008; Creswell and Poth, 2006). Due to the pandemic, we cancelled our plans for face-to-face interviews, instead we recruited a U.S. national sample with 18 respondents from the Prolific online panel. 6 of the respondents provided answers in a copy-paste fashion with information derived from various online websites, so we took them out of the sample. Our final sample consisted of 12 respondents ($M_{\text{age}} = 32$, 33% female). Using a set of open-ended questions, we asked respondents to write their thoughts in detail about (1) spending money carefully, (2) consuming possessions carefully, and (3) the most important things when purchasing/using/disposing of their possessions. 12 interviews enabled us to reach the saturation point, and we did not see the need to conduct more interviews. Item generation relied on theoretical insights derived from previous research as well as examination of the data we obtained in this exploratory investigation. We identified frequently mentioned answers and converted them into scale items. We generated an initial pool of 81 items to reflect the two dimensions of frugality. We provided two research assistants with the definition and explanation of each dimension, as well as the set of items, and then asked them to allocate the items to one of the two dimensions as they saw fit or to remove them from the set. As a result, 18 items remained.

2.4.2 Study 2: Scale Development and Reliabilities

To test the 18 items generated in Study 1, we recruited a U.K national sample again from the Prolific online panel. Our sample consisted of 216 respondents ($M_{\text{age}} = 32$, 46% female). The majority of respondents (76.4%) indicated they belonged to lower or middle income class with yearly income less than £80,000.

We put the 18 items into a 7-point Likert scale format (1 = strongly disagree, 7 =

strongly agree) and asked the respondents to indicate the extent to which they agreed with these statements. We deleted items under two criteria: if corrected item-to-total subscale correlations were below .50, and if they had statistically higher correlations with a dimension to which they were not hypothesized to be related (Bearden, Netemeyer, and Tell, 1989). We used Varimax with Kaiser normalization as the rotation method. The analysis generated a reduced scale of 9 items (see Table 2.4). Items that loaded under factor 1 constitute the scale of SRF, and items that loaded under factor 2 constitute the scale of CRF. We further calculated Cronbach's alpha for each dimension (SRF: $\alpha = .784$; CRF: $\alpha = .712$).

Table 2.4 Rotated component matrix.

Factor	Component	
	1	2
I like to keep my budget under control.	.759	
When I purchase something, I want to get the best deal.	.725	
I plan my purchases beforehand.	.621	
When buying something, it is good to think carefully about how much I spend.	.617	
I wait until I can get a product at the best price.	.584	
I do not dispose of a product if it can still be useful in alternative ways.		.718
I do not throw things away unless they get too damaged to be repaired.		.684
I keep empty items such as bags and containers to use them again in the future.		.662
I try to make products (like toothbrushes, shampoos, pens) last.		.527

2.4.3 Study 3: Convergent and Divergent Validities

We explored the convergent and divergent validities of SRF and CRF from the conceptually related constructs of price consciousness, propensity to plan spending, value consciousness, deal proneness, voluntary simplicity, and environmental consciousness. We recruited a U.K. national sample from the Prolific online panel. Our sample consisted of 302 respondents ($M_{\text{age}} = 35$, 55% female). The majority of respondents (83.1%) indicated they belonged to lower or middle income class with yearly income less than £80,000.

We analyzed the correlations among the variables after they responded to the conceptually related trait scales. Following Campbell and Fiske's (1959) methodology, the explored trait variables were distinct and not perfectly correlated. The correlation between SRF and CRF

was .448. Although SRF tends toward propensity to plan spending money and value consciousness, both dimensions are not perfectly correlated with other traits.

Although in earlier sections we elaborated on the conceptual differences between frugality and the aforementioned constructs, the results from Study 3 empirically show that the specific dimensions of frugality are also distinct from those constructs. As seen on the table below (table 2.5), spending-related frugality is strongly and positively correlated with propensity to plan spending (.700) and value consciousness (.691). Previous literature provides evidence that supports this positive correlation. For example, literature conceptualizing frugality as spending-related has shown that it motivates self-regulated purchases such as waiting for sales, reduces consumers' engagement in compulsive consumption (Bove et al., 2009; Bearden et al., 2006; Bardhi and Arnould, 2005; Gould et al., 1997).

Consumption-related frugality, similarly, has the highest positive correlations, despite being weaker, with value consciousness and propensity to plan spending. In order to consume in frugal ways, consumers need to plan their spending such as buying more durable, multi-use products, and they need to do it considering the balance between price and quality. CRF, as compared with SRF, however, has a stronger positive correlation with environmental consciousness. As prior literature conceptualizing frugality as consumption-related suggests, frugal consumers tend to be environmentally-friendly, not necessarily because they care about the environment, but mainly because they want to make the best use of their resources by repairing, sharing or multi-purposely using them (Corral-Verdugo et al. (2011; Evans, 2011).

Table 2.5 Correlations among consumer traits.

		Price consciousness	Propensity to Plan Spending	Value consciousness	Deal Proneness (active)	Deal Proneness (passive)	Voluntary Simplicity	Environmental consciousness
SRF	Pearson Corr.	.242	.700	.691	.406	.392	.033	.252
	Sig (2-tailed)	.000	.000	.000	.000	.000	.564	.000
CRF	Pearson Corr.	.217	.374	.422	.301	.314	.171	.331
	Sig (2-tailed)	.000	.000	.000	.000	.000	.003	.000

Therefore, we can conclude that the two dimensions are distinct from each other as well as from other trait variables.

2.5 Consequential Effects on the 3R Model of Consumption

In the following subsections, we explore the extent to which the proposed bidimensional scale of frugality can predict consumer behavior in the 3R model of consumption. 3R strategies motivate consumers to reduce their resource consumption, reuse products for other purposes after their life cycle is over for the original purpose, and recycle as a means of disposal. Of particular importance is understanding the linkages between consumers' traits and engagement in this initiative, as the share of municipal solid waste generated by households compared with the amount of total waste generated worldwide is considerably high (35%) (United Nations Environment Programme, 2017).

Research conceptualizing frugality as waste avoidance has shown positive correlations between frugality and proenvironmental behavior; that is, frugal consumers use products as long as possible, take good care of them, and, at the end of product use, repurpose, repair, reuse, or recycle them (Awais et al., 2020; Evers et al., 2018; Suárez et al., 2020; Tapia-Fonllem et al., 2013). However, research conceptualizing frugality as financial prudence finds no relationship between frugality and proenvironmental behavior. For example, frugality has no significant correlations with reduced environmental impact in the areas of transportation use and household energy use or with acquisition and disposal of products (Kropfeld et al., 2018; Touchette and Nepomuceno, 2020). Evidence also shows that the effect of frugality on proenvironmental behavior is contingent on other factors. For example, frugal consumers do not engage in energy-saving behavior unless they have an environmental self-identity (Thøgersen, 2018), and they engage in proenvironmental behavior such as repurposing a product only if doing so is perceived as negative by others (Lee, 2016; Philp and Nepomuceno, 2019). Extending these findings, we investigate whether the identified distinct dimensions of frugality differ in predicting practices with the 3R strategies.

2.5.1 Reduce

Reduce strategies refer to the use of products with caution to decrease the amount of resource use and waste. Consumer behavior pursuing a reduce strategy has contributed to the emergence of the circular economy and sustainable consumption, including sharing resources, secondhand consumption, and donation (United Nations, 2016; Zink and Geyer, 2017). Accordingly, as a proxy for consumer behavior with a reduce strategy, we investigate consumers' tendency to use secondhand products and to donate their financial or physical belongings depending on their SRF and CRF.

Secondhand Consumption

Secondhand markets create opportunities for consumers to avoid waste (Guiot and Roux, 2010), escape the mundaneness of conventional channels, resist conformism through creativity (Sherry, 1990; Thompson and Haytko, 1997), transform products to achieve personal ends (Gregson and Crewe, 1997), and advocate for certain causes (e.g., waste avoidance, environmentally friendly consumption) (Roux and Korchia, 2006). In addition, secondhand markets provide financial opportunities when the used products are available for lower prices (Barnes and Lea-Greenwood, 2018), though price of the used and new products may not always differ considerably or lower prices may be overcome by lesser variety or lower quality (Lee and Rhee, 2021). Previous research indicates that frugal consumers prefer secondhand consumption (e.g., Cervellon et al., 2012; Livingston, 2015; Rulikova, 2019). However, we suggest that only one dimension of frugality (SRF or CRF) is positively related to secondhand consumption. Unless considerable price differences exist between the new and preowned products, secondhand markets will not provide advantages for consumers with high SRF, who seek financial benefits. However, other advantages such as waste reduction and environmental protection will persist regardless of the price. Therefore, we predict that consumers' CRF will be positively correlated with their preference for and engagement in secondhand purchases. However, we do not predict such a relationship between consumers' SRF and secondhand purchase behavior.

Donation

Donation is linked to the concept of generosity, which motivates consumers to share their money or resources with others (Kasser, 2005), and it is one of the strategies to decrease resource use and waste. Although generosity may seem to be negatively related to frugality, frugal consumers are willing to donate more when they are reminded that their possessions will be wasted if disposed of otherwise (Gatersleben et al., 2019; Shoham et al., 2017). Compared with non-frugal consumers, frugal consumers are more selective about whom they will donate to, because they want to ensure that the receiver will be a good caretaker (Arnould, 2003). Although donation is an efficient way to prevent product waste, this is not the case with monetary resources. Unlike physical products, monetary resources do not have a limited life cycle and are not wasted if not used. We suggest that consumers with high CRF will donate their possessions to prevent wastefulness while consumers with high SRF will have no such motivation to do so. Relatedly, we predict that consumers with high CRF,

who are concerned about the careful use of goods, will donate their possessions to prevent waste, while consumers with high SRF, who are concerned about the careful use of money, will be reluctant to do so. Therefore, we expect consumers' CRF to be positively correlated with their tendency to donate. However, we do not predict such a relationship between consumers' SRF and their donation tendency.

2.5.2 *Reuse*

Reusing in consumption refers to the repeated use of products, such as repairing broken items or converting and reusing them for purposes other than the original purpose. Consumer behavior pursuing reuse strategies includes the efficient use of products with full potential, resulting in sustainability in both material and financial resources. As a proxy for consumer behavior with a reuse strategy, we investigate consumers' tendency to repair broken products and to choose multiple-use items such as shopping bags or bottles depending on their SRF and CRF.

Repairing

Examining frugality from a consumption-related perspective, Gould et al. (1997) show that frugal consumers are likely to self-produce or reorganize available resources for further consumption. Lastovicka et al. (1999) and De Young (1986) also show that frugal consumers repair their products for further use. Research examining frugality from a spending-related perspective indicates that frugal consumers tend to repair broken items out of financial (vs. waste avoidance) motives (Bardhi and Arnould, 2005; Podkalicka and Potts, 2014). We suggest that only one dimension of frugality (SRF or CRF) is positively related to repairing behavior. Unless repairing costs considerably lower than buying a new product, such behavior does not provide advantages for consumers with high SRF, who seek financial advantages. Yet other advantages such as waste reduction and environmental resource protection persist regardless of the cost of repairing an item. Because repairing is inherently related to the better and longer use of one's possessions, we expect consumers' CRF to be positively correlated with their tendency to repair items. However, we do not predict such a relationship between consumers' SRF and repair tendencies.

Multiple Use of Products

Frugal consumers avoid excessive consumption. They try to make full use of what they have on hand by using their products multiple times and then repairing and reusing them when

possible to avoid waste (Albinsson et al., 2010). Some prevalent examples of using products multiple times include reusing grocery containers, using grocery bags as trash bags, and using old clothes for cleaning. We expect consumers with high CRF to be more likely to use their products multiple times and for different purposes. However, we do not predict such a relationship between consumers' SRF and their tendency toward multi-usage.

2.5.3 *Recycle*

Finally, we investigate consumers' recycling tendency in relation to distinct dimensions of frugality. Recycling involves converting waste materials that would otherwise be thrown away into new materials. Prior research conceptualizing frugality as waste avoidance has shown a positive correlation between frugality and environmentally conscious behavior. For example, frugality derives satisfaction from finding ways to avoid waste (De Young 1986). Accordingly, they follow proenvironmental practices such as recycling and reducing electricity and gas use (Fujii, 2006; Goldsmith and Flynn, 2015; Nicol, 2009; Pinto et al., 2011). However, prior research conceptualizing frugality as financial prudence finds no positive relationship between frugality and environmentally conscious behavior. For example, frugality with a waste avoidance emphasis motivates recycling and reductions in electricity use while frugality with a financial emphasis motivates reductions in electricity use only and not recycling (Gatersleben et al., 2014). Similarly, in his qualitative study, Evans (2011) acknowledges the distinction between financial prudence and waste avoidance and suggests that frugality motivates proenvironmental practices only if it is combined with environmental concerns. Therefore, we expect consumers' CRF to be positively correlated with their recycling tendency. However, we do not predict such a relationship between consumers' SRF and recycling.

2.6 *Study 4: 3R Behavioral Correlates of SRF and CRF*

In Study 4, we investigate the hypothesized relationships between the two dimensions of frugality (SRF and CRF) and the 3R strategies. We recruited a U.S. national sample from the Prolific online panel. The sample consisted of 172 respondents ($M_{\text{age}} = 38$, 59% female). Their yearly income was \$58,949 on average. We administered the SRF and CRF scales in a randomized order and asked demographic questions. Reliability indices (Cronbach's coefficients) for SRF and CRF were 0.76 and 0.70, respectively, indicating good internal consistency. We then measured all the dependent variables in a randomized order.

2.6.1 Reduce

Secondhand Consumption

Method and procedure. We explored the relationship of SRF and CRF with participants' attitudes toward using secondhand products, actual secondhand product usage, and likelihood to buy secondhand products in the future. First, participants indicated their attitudes toward using secondhand products ("foolish/wise" and "worthless/valuable") on a 7-point scale; second, we measured participants' actual product usage ("How long have you been using secondhand products?" 1 = I do not buy secondhand products, 2 = less than 1 year, 3 = 1–2 years, 4 = 3–4 years, 5 = more than 5 years) (Biswas et al., 2000; Smith et al., 1994) and likelihood to use secondhand products in the future ("How likely will you be to use a secondhand product in the future ? 1 = very unlikely, 7 = very likely).

Results. Correlational analyses revealed that participants with higher CRF had more positive attitudes toward using secondhand products, engaged more in secondhand product usage, and were tend to buy secondhand products more. Specifically, participants with higher CRF perceived using secondhand products as wise (vs. foolish) ($r = 0.19, p = 0.013$) and valuable (vs. worthless) ($r = 0.16, p = 0.041$). However, we found no correlation between participants' SRF and their attitudes toward using secondhand products ($r = 0.11, p = 0.149$ and $r = 0.09, p = 0.219$). Participants with higher CRF indicated that they have been buying secondhand products for a longer time ($r = 0.22, p = 0.004$), and their intention to buy secondhand products was higher ($r = 0.22, p = 0.003$). However, we found no correlation between participants' SRF and actual usage or likelihood of buying secondhand products in the future ($r = 0.04, p = 0.582$ and $r = 0.03, p = 0.723$). Importantly, the pattern of correlations showed that, compared with SRF, CRF had a stronger correlation with both participants' actual usage (CRF: $r = 0.22, p = 0.004$; SRF: $r = 0.04, p = 0.582, NS$; $z = 2.17, p = .030$) and likelihood of buying secondhand products in the future (CRF: $r = 0.22, p = 0.003$; SRF: $r = 0.03, p = 0.723, NS$; $z = 1.93, p = .053$).

Willingness to Donate

Method and procedure. We conducted Study 4 in January 2021, about one year into the devastating global COVID-19 outbreak. Accordingly, we were able to measure individuals' willingness to donate in a realistic setting. Rather than exploring donation to charities, we specifically measured participants' motivations to support others financially and to share their resources with others, both of which have become crucial and prominent during the

pandemic (Marston et al., 2020). We measured participants' willingness to donate with two questions ("During these COVID-19 days, how much are you willing to engage in the following acts: (1) financially supporting those in need and (2) sharing your resources with others?" 1 = not at all, 7 = very much). As control variables, we also asked participants about their income level and whether they had helped anyone financially or shared their resources during the pandemic ("During these COVID-19 days ... (1) Did you help anyone financially? and (2) Did you share your resources with others?" 1 = no, 2 = yes).

Results. We took the average of the two items to create a composite score of willingness to donate ($\alpha = .73$). Correlational analyses revealed that CRF was strongly and positively correlated with participants' willingness to donate ($r = 0.22, p = 0.004$). However, we found no correlation between SRF and willingness to donate ($r = 0.05, p = 0.544$). Importantly, the pattern of correlations supports the hypothesis that CRF has a stronger correlation with willingness to donate than SRF (CRF: $r = 0.24, p = 0.001$; SRF: $r = 0.06, p = 0.412, NS$; $z = 2.02, p = .04$). Moreover, we found a strong, positive, partial correlation between CRF and willingness to donate when controlling for participants' income and actual involvement in financially helping others and sharing resources ($r = 0.24, p = 0.001$). However, there was no correlation between SRF and willingness to donate ($r = 0.06, p = 0.412$). Inspection of the zero-order correlation ($r = .22$) shows that controlling for participants' income level and actual donation behavior did not have an effect on the strength of the relationship between these two variables. In summary, these results provide support for the hypothesis that consumers' CRF, but not SRF, is positively correlated with the reduce strategy (i.e., tendency to use secondhand products and to donate financial or physical assets).

2.6.2 Reuse

Repairing and Maintaining

Method and procedure. We explored participants' attitudes toward repairing and maintaining their products in two ways. First, participants indicated their attitudes toward repairing broken products, under the assumption that repairing and buying new products cost the same ("foolish/wise" and "worthless/valuable"), on a 7-point scale. Second, we measured participants' tendency to repair and maintain their current products with three questions ("If you have torn clothing and sewing the rip and buying new cost you the same, which option would you prefer?" "If taking your broken item to a repair shop costs you the same as buying new, which option would you prefer?" and "Some people tend to throw

away their broken products and replace them with new ones. Others tend to repair them instead. If these two options cost you the same, which option would you prefer?") on a 7-point scale. A composite score of the tendency to repair and maintain possessions was generated by taking the average of the three items ($\alpha = .80$).

Results. Correlational analyses revealed that participants with higher CRF had more positive attitudes toward repairing and maintaining products. Specifically, those with higher CRF perceived repairing products as wise (vs. foolish) ($r = 0.23, p = 0.002$) and valuable (vs. worthless) ($r = 0.27, p = 0.000$). However, we found no correlation between participants' SRF and their attitudes toward repairing ($r = 0.08, p = 0.309$ and $r = 0.14, p = 0.074$). In addition, participants with higher CRF had a greater tendency to repair and maintain their products ($r = -0.33, p = 0.000$). Yet there was no correlation between participants' SRF and their tendency to repair and maintain their possessions ($r = -0.07, p = 0.395$). Importantly, the pattern of correlations supports the hypothesis that CRF has a stronger correlation with tendency to repair and maintain than SRF (CRF: $r = -0.33, p = 0.000$; SRF: $r = -0.07, p = 0.395$, NS; $z = 3.02, p = .003$).

Multiple Use of Products

Method and procedure. To understand participants' tendency to use products multiple times and for different purposes, we asked them their preference between the two options on a 7-point scale ("I prefer to carry my own shopping bag" vs. "I prefer to use plastic carrier bags"; "I prefer to buy my drink in a returnable bottle" vs. "I prefer to buy my drink in a regular bottle").

Results. Correlational analyses revealed that participants with higher CRF preferred carrying their own shopping bags to using plastic bags ($r = -0.27, p = 0.000$) and preferred buying their drinks in a returnable bottle to buying a regular bottler ($r = -0.26, p = 0.001$). However, we found no correlation between participants' SRF and their preferences for the provided options ($r = -0.02, p = 0.771$ and $r = -0.03, p = 0.666$). Importantly, the pattern of correlations supports the hypothesis that CRF has a stronger correlation with the multiple use of products than SRF, both for preference for carrying a reusable shopping bag (CRF: $r = -0.27, p = 0.000$; SRF: $r = -0.02, p = 0.771$, NS; $z = 2.71, p = .007$) and for a reusable bottle (CRF: $r = -0.26, p = 0.001$; SRF: $r = -0.03, p = 0.666$, NS; $z = 2.46, p = .012$). In summary, these findings support the hypothesis that consumers' CRF, but not SRF, is

positively correlated with the reuse strategy (i.e., tendency to repair and maintain their belongings and to use products multiple times when possible).

2.6.3 Recycle

Method and Procedure

We measured participants' recycling shopping behavior with the following three items ("I make a special effort to buy products made with recycled materials"; "I make a special effort to buy products that can be recycled locally"; and "When shopping, I make an effort to look for products that I can reuse"; 1 = strongly disagree, 7 = strongly agree; Smith et al., 1994). A composite score of recycling behavior was created by taking the average of these three items ($\alpha = .88$). We further asked how long the participants had been recycling (1 = "I do not recycle," 2 = "less than 1 year," 3 = "1–2 years," 4 = "3–4 years," and 5 = "more than 4 years") and the extent to which they recycled specific types of waste, including aluminum, plastic, paper, steel cans, cardboard, and glass (1 = "never recycle," 7 = "always recycle"; $\alpha = .90$).

Results

Correlational analyses revealed that participants with higher CRF had a greater tendency to purchase products made from recycled materials or products that can be recycled easily ($r = 0.34, p = 0.000$). Yet we found no correlation between participants' SRF and their recycling shopping behavior ($r = -0.04, p = 0.587$). Importantly, the pattern of correlations supports the hypothesis that CRF has a stronger correlation with recycling shopping behavior than SRF (CRF: $r = 0.34, p = 0.000$; SRF: $r = -0.04, p = 0.587, NS$; $z = 3.36, p = .001$).

Correlational analyses further showed that CRF was strongly and positively correlated with actual recycling behavior. Specifically, participants with higher CRF indicated that they have been recycling for a longer time ($r = 0.18, p = 0.020$). However, no correlation was found between SRF and actual recycling behavior ($r = -0.00, p = 0.989$). The pattern of correlations shows that CRF has a stronger correlation with actual recycling behavior than SRF (CRF: $r = 0.18, p = 0.020$; SRF: $r = -0.00, p = 0.989, NS$; $z = 3.36, p = .05$). Finally, a strong and positive correlation was observed between waste recycling behavior and CRF ($r = 0.25, p = 0.001$) but not SRF ($r = -0.10, p = 0.205$). In summary, these results support the hypothesis that consumers' CRF, but not SRF, is positively correlated with their recycling behavior.

2.7 General Discussion

Chapter 1 explores frugality through a disaggregated perspective, and suggest that it has two distinct dimensions: spending-related frugality and consumption-related frugality. Moreover, the relationship between these distinct dimensions of frugality and the 3R (reduce, reuse, recycle) model of consumption is investigated. Consumption-related frugality is found to be positively correlated with the 3R strategies of consumer behavior while spending-related frugality has no correlation with these.

2.7.1 Theoretical and Managerial Implications

First, we extend the research stream on frugality by developing and validating a bidimensional frugality scale that enables the measurement of its two distinct dimensions: SRF and CRF. Second, we present in-depth theorization and empirical evidence of the distinction of SRF and CRF from the conceptually related constructs of price consciousness, propensity to plan spending, value consciousness, deal proneness, voluntary simplicity, and environmental consciousness. This bidimensional conceptualization of the frugality construct helps to explore deeper and explain the inconsistent understandings of frugality and findings presented in previous research. Third, we investigate the relationship between the distinct frugality dimensions and 3R consumption strategies, including secondhand consumption, repairing, reusing, donation, and recycling behavior. We show that while CRF is significantly and positively related to 3R consumption strategies, SRF has no relationship to these strategies.

Additionally, our study has policy and managerial implications. The discussion of frugality is of particular importance, as proenvironmental consumer behavior is often understood in terms of recycling and green purchase, without including reduction in consumption and resource use (Connolly and Prothero, 2003). Indeed, research shows that environmental consciousness alongside frugality predicts consumer practices in the 3R model of consumption (e.g., Fujii, 2006; Lastovicka et al., 1999). Although frugality and environmental consciousness differ in motivations (e.g., García-de-Frutos et al., 2018; Kozinets et al., 2010; Witkowski, 2010), both consumer traits individually contribute to reductions in resource use (Graafland, 2017; Sheth et al., 2011; Black, 2010;).

The understanding of dimensions of frugality is therefore important to motivate consumers to take actions against wasteful use of resources and the resultant global, environmental, and social problems. As excess spending and consumption increase in society, more responsible and frugal ways of spending and consuming need to be

encouraged in parallel. Emerging adoption of frugal practices and a shift to a consumption model that relies on the 3R model among companies, government entities, and individual consumers make our research timely. Understanding the dimensions of frugality enables both public agencies and brands to generate better and more effective strategies to further motivate proenvironmental behavior, especially during financial or health crises. For example, consumers going through a downturn may feel connected with the brand when they are reminded that buying it is a sound decision and brings high value (Quelch and Jocz, 2009). Our results also suggest that when appealing to consumers, decision-makers should not treat frugal consumers the same way. Specifically, consumers with high CRF are more likely to adopt sustainable lifestyles and therefore may respond more positively to consumption reduction or sustainable-living campaigns. By contrast, consumers with high SRF may not be motivated by or respond to such appeals.

2.7.2 Limitations and Future Research

The findings are subject to some limitations. First, scale development to measure a construct depends on the conceptualization of that construct. Scale development process, especially item generation, carries a risk of contamination with relevant constructs (MacKenzie, Podsakof and Podsakof, 2011) such as thriftiness or propensity to plan spending in our essay. In order to prevent it, we followed Morgado et al. (2018)'s suggestions and used both inductive and deductive approaches: study 1 follows an inductive approach with open-ended essay questions and the rest of studies follows deductive approaches utilizing scales of various constructs. Still, future research is needed to differentiate the dimensions of frugality from relevant constructs more clearly, especially propensity to plan spending and value consciousness by controlling them in experimental designs.

Second, the results only show correlations and are insufficient to prove causal effects. Experimental research is needed to investigate if the dimensions of frugality have causal effects on the 3R consumption behavior or not. Moreover, the results are derived from self-reports from samples from U.S and U.K. Frugality and 3R consumption behavior might have different connotations and understandings in lower-income countries where, for example, secondhand consumption is stigmatized and perceived as it belongs only to those who cannot afford new products (Isla, 2013). While the lack of data from more generalizable samples such as with diverse demographic backgrounds including participants from higher income classes or lower-income countries presents a drawback in the making generalizable inferences based on the results, therefore; it calls for future research to investigate whether

income levels or cultural backgrounds play a role in the understanding of frugality.

Moreover, we examine frugality as a consumer trait variable. It is of importance to note that while SRF and CRF are distinct dimensions, they may overlap in some venues, such as when receiving store credits for recycling plastic bottles, and consumers may score high in both SRF and CRF. Furthermore, like many other individual differences, situational factors may influence how individuals behave in diverse situations and contexts (e.g., during a pandemic or an economically unstable period). Regarding the consequential effects of frugality (Study 4), our findings are based on participants' self-reports obtained in online studies. Thus, we were restricted to examining participants' intentions, and could not gather data on their actual behaviors. In order to enhance the external validity of the results, a field study to observe individuals' actual behavior would be ideal.

Our research provides several research avenues. While we use correlational analyses in exploring the consequential effects of SRF and CRF, future research could experimentally manipulate SRF and CRF to uncover their cause-and-effect relationships to the explored dependent variables (3R consumption strategies). Future research might also extend our study by exploring other consumer behavioral correlates of SRF and CRF (e.g., consumers' quantity versus quality preference in purchases, compulsive and impulsive buying behavior) or their relationship to other trait variables (e.g., consumers' maximization and variety-seeking tendency).

Another research venue could be to explore whether SRF and CRF prevail across different cultures and economies. Frugality sometimes acts as a coping mechanism with uncertainty (Rayburn et al., 2021), and its understanding differs between Western and Eastern cultures (Karimova et al., 2020). Presumably, frugality may be perceived more along the lines of SRF in lower-income countries and more as CRF in higher-income countries, and both dimensions may play a significant role as a coping mechanism. For example, consumers in a lower-income country may indicate that they are prepared for the uncertainties of the future by scoring higher in SRF, while consumers in a higher-income country may do so by scoring higher in CRF.

The indirect effects of these dimensions on consumer responses to brand activities might be yet another future research venue. Jagannathan et al. (2020) show that consumers feel more worthy as they act in frugal ways, and this also changes how they respond to social problems such as prejudice and discrimination. We speculate that consumers scoring differently on SRF and CRF might also differ in their responses to brand transgressions or word-of-mouth behavior. Finally, future research might explore whether individuals act in

frugal ways (i.e., spend and consume with caution) to impress others. It would yield fruitful insights also to explore conspicuous frugality when consumers score low on both dimensions but still act in frugal ways for impression management purposes.



Chapter 3

EFFECTS OF THE PREOWNED MARKET ON LUXURY BRANDS

3.1 Preowned Luxury

The sales volume of luxury products reached \$281 billion in 2020 in the U.S. market (Deloitte, 2020). Despite its significant growth, the luxury market has been constantly changing mainly due to digital transformation. Access to luxury is now easier than ever due to the increasing number of online retailers. Luxury now belongs not only to the upper class but also to the middle class, which in the past could only occasionally afford it (Silverstein and Fiske, 2003). The increasing popularity of the preowned luxury as a new phenomenon underscores this trend toward accessible luxury.

Preowned markets have often been investigated within the framework of sustainability, and such practices have been explored from the perspectives of collective behavior such that swap markets provide both buyers and sellers with a freedom to discuss and decide on pricing by increasing cooperation instead of competition (Belk, 1995; Belk, Sherry, and Wallendorf, 1988), sociocultural dynamics such as consumers experience a festive shopping atmosphere in flea markets (Sherry 1990), buyer motivations i.e., escaping the regular market that pushes overconsumption (Bardhi and Arnould, 2005; Belk, 1988), fashion and income such that high-income consumers purchase preowned clothing for unique styles while lower-income consumers purchase preowned clothing for their higher affordability compared to brand new ones (Isla, 2013), vintage products such that the preference for vintage products is mainly caused by consumers' need for uniqueness and nostalgia, while the purchase of preowned products that are not vintage and younger than 10 years is basically motivated by their affordable pricing (Cervellon, Carey, and Harms, 2012), collecting such that among all types of luxury consumption such as travel, food or clothing, collecting is considered as the least selfish act, and that consumers do it not only for themselves but also for the sake of art or science (Belk, 1995) and meanings attached to preowned luxury including unique finds and future investments (Aycock, 2021; Turunen and Leipämaa-Leskinen, 2015).

In line with the previous literature, among a wide range of items offered for sale, luxury

products occupy a large part of the preowned market. The rapid increase in online retailers selling preowned luxury products, such as Thredup, Poshmark, The RealReal, and Vestiaire Collective, has contributed to the growth of the preowned market. Many luxury brands are proponents of this trend as well. Burberry, for example, began partnering with one of the largest preowned retailers The RealReal in 2019. The preowned watch specialist Watchfinder & Co. was acquired by Richemont, and luxury jewelry brands such as Cartier have begun introducing preowned products in their stores (Turunen, Cervellon, and Carey, 2019).

Spillover Effects on Customers' Brand Attachment

While the previous literature on preowned markets has mainly focused on the customers of preowned luxury, an equally important but neglected player in the market remains unseen: luxury customers who purchase new (not preowned) products. Luxury brands are typically exclusive to a small segment of consumers. The availability and affordability of luxury products, however, have increased as a result of a competitive market environment, shifting economic conditions, and new technologies. The preowned market is one the venues that increases availability of luxury brands. Despite providing the opportunity to reach a larger customer base, the preowned luxury market carries the risk of damaging luxury brand attributes, such as exclusivity and high price premiums.

This creates a spillover effect on customers of new luxury products, which means the preowned market generates an indirect effect on luxury customers brand perceptions via decreased exclusivity. What do customers who purchase luxury brands for their exclusivity and status signaling think when the brand is now less exclusive? Luxury brands' availability in the preowned market may well attract new customers, especially the ones that cannot afford new products, yet, how does it affect customers who can already afford to purchase new products from those brands?

As the preowned market begins attracting more diverse customer segments, luxury brands can no longer rely on the benefits of exclusivity in retaining their existing customers. Rather, they need to protect, if not strengthening, their customers' brand perceptions while catching up with new trends and opportunities in the market. Previous research indicates that one of the key aspects of brand perceptions that affect consumers' downstream choices such as purchase intentions and willingness to pay for luxury brands is brand attachment (Fedorikhin, Park, and Thomson 2008; Kaufmann et al. 2016). Brand attachment refers to the tie based on emotional and cognitive reflections that connect consumer to the brand

(Park, MacInnis, and Priester, 2006). The strength of attachment indicates the extent to which consumers use their resources such as money or time for the brand (Park et al., 2010), therefore it signals consumers' intention to purchase the luxury brand by paying high price premiums.

Luxury customers have already established relationships with and hold a certain degree of attachment towards the luxury brands they purchase from. If the preowned market has an effect on brand attachment, it is highly likely that their purchase intentions as well as willingness to pay for price premiums will change as well. Therefore, we examine brand attachment of existing customers of luxury brands to start investigating the spillover effects of the preowned market on luxury customers.

A key concern of this essay is to examine whether the preowned market damages the relationship between the luxury brand and its existing customers and how these brands can fully benefit from the preowned market by both acquiring new customers and retaining existing customers. The process by which luxury customers perceive value in the preowned market is important for the implementation of effective strategies. Given the significant growth in the number of resellers and the volume of preowned luxury being sold, developing an in-depth understanding of the preowned market is both timely and relevant.

This essay offers theoretical and managerial contribution to the existing literature by looking at the preowned luxury market from the perspective of luxury customers – customers of new luxury products. More specifically, it evaluates how the preowned market affects luxury customers' brand attachment. Across three studies, we address four questions: Are preowned products perceived as the same as products from the brand's downscale extension? If not, what is the boundary condition? How can brands navigate the preowned market dynamics to strengthen their existing customers' brand attachment and what is the underlying mechanism for that? We provide findings from non-customers as well for complementary purposes. In our conceptualization, we differentiate preowned luxury from two related concepts: counterfeit and vintage luxury.

3.1.1 Counterfeit vs Preowned Luxury

The current investigation on the preowned market, that is distinct from another form of market that increases luxury brand's availability to a larger consumer base: counterfeiting. Counterfeits are closely similar reproductions of trademarked brands (Cordell, Wongtada, and Kieschnick, 1996). By contrast, preowned luxury products are authentic but previously owned and used by someone else. Previous research has demonstrated that a reputational

risk exists with both counterfeits and preowned luxury. Customers who purchase counterfeits have positive views of those products for their quality and functionality (Phau and Teah, 2009), but they still feel anxious in case others were to find out about their counterfeit purchases (Zhou and Belk, 2004). Similar to counterfeits, Roux (2006: 32) suggests that preowned luxury consumption is sometimes seen as a “tension or conflict between an original identity and a borrowed appearance”. Preowned luxury customers believe they are taking a reputational risk by using a preowned luxury product (Turunen and Leipämaa-Leskinen, 2015). While this is the case with consumers of counterfeits or preowned luxury, previous literature does not provide sufficient evidence from the perspective of customers of brand-new luxury. We run a pilot study to see whether counterfeits and preowned luxury receive a diverse set of responses from luxury customers.

Previous literature on counterfeit luxury has mainly focused on the attitudes towards counterfeits through the affect component, and found that it generates distress, guilt and shame for consumers who use counterfeits (Zampetakis, 2014; Cademan, Henriksson and Nyqvist, 2012). Moreover, consumers face an ethical dilemma while buying counterfeits (Jiang et al., 2019), and they experience increased degree of social anxiety (Wang, Stoner and John, 2019). In order to compare the preowned luxury with such previous findings of the counterfeit luxury, we planned to see whether the preowned luxury generates the same valence of affect as counterfeits do. More specifically, we examined consumers’ positive or negative affects triggered by ads for either counterfeit or preowned luxury products and compared them with each other. We used the Positive and Negative Affect Scale (Watson, Clark, and Tellegen, 1988) as it is one of the widely used scales to measure affect in several research areas including psychology, sociology, and consumer behavior (Merz et al., 2013). It consists of 20 items including both negative and positive affect such as anger, shame, disappointment, inspiration, pride, or happiness.

Pilot Study 1

We recruited 94 Amazon Mechanical Turk workers (60% female) who are all luxury customers based on their self-reported answer to the question whether they purchased a luxury product last year. If they did, we asked them to write the brand name. After the filler task, we gave them a piece of news stating that brand’s counterfeit (vs. preowned) products are now available in the market. After seeing the news, they indicated how they felt by filling out the Positive and Negative Affect Scale. Counterfeit (vs. preowned) products generated significantly greater (lesser) negative feelings, such as being upset ($t(92) = -$

2.309, $p = .023$; $M_{\text{preowned}} = 1.70$ vs. $M_{\text{counterfeit}} = 2.38$), irritation ($t(92) = -2.269$, $p = .026$; $M_{\text{preowned}} = 1.63$ vs. $M_{\text{counterfeit}} = 2.38$), and anger ($t(92) = -2.385$, $p = .019$; $M_{\text{preowned}} = 1.41$ vs. $M_{\text{counterfeit}} = 2.17$). By contrast, preowned (vs. counterfeit) products generated significantly greater (vs. lesser) positive feelings, such as excitement ($t(92) = 3.614$, $p < .000$; $M_{\text{preowned}} = 3.50$ vs. $M_{\text{counterfeit}} = 2.17$), pride ($t(92) = -2.015$, $p = .047$; $M_{\text{preowned}} = 2.63$ vs. $M_{\text{counterfeit}} = 1.90$), inspiration ($t(92) = 2.682$, $p = .009$; $M_{\text{preowned}} = 2.61$ vs. $M_{\text{counterfeit}} = 1.73$), and enthusiasm ($t(92) = 3.430$, $p = .001$; $M_{\text{preowned}} = 3.39$ vs. $M_{\text{counterfeit}} = 2.15$). The emergence of diverse emotions indicates that the two markets are different from each other though they both offer luxury brands at lower prices and thus decrease their exclusivity and prompt reputational risk. Thus, previous literature on counterfeits is not directly applicable to the preowned luxury.

3.1.2 *Vintage vs Preowned Luxury*

We limit the scope of our research into preowned luxury that is not vintage. The concept of preowned luxury covers vintage products, but preowned and vintage are distinct. Vintage products, which are at least older than 10 years (Turunen, Cervellon, & Carey, 2019), constitute a specific part of the preowned market. Motivations for purchasing vintage products may differ from those for purchasing other types of preowned products. For example, while the purchase of preowned products is motivated by environmental concerns, need for social climbing, and higher affordability (Guiot and Roux, 2010), the purchase of vintage products is motivated by nostalgia and uniqueness (Rousseau and Venter 2021; Amatulli et al., 2018) and it is sometimes preferred by consumers who experience meaning threats due to mortality salience or death reminders (Sarial-Abi, Vohs, Hamilton, and Ulqinaku, 2017). Herein, we focus on preowned luxury products that are not vintage. In doing so, this essay sheds light into the phenomenon of preowned luxury and thus builds on prior research on luxury brands. The extant literature suggests that luxury brand characteristics include premium pricing, an aspirational and premium brand image, quality products and pleasurable purchase experiences (Keller, 2009). We adopt this guideline in our luxury brand conceptualization and define luxury brand customers as customers who purchase new (unused) products from luxury brands. We use the measure of brand attachment to examine how the preowned market affects the perception of luxury customers. Previous research indicates that brand attachment affects downstream brand outcomes such as purchase intentions and willingness to pay (WTP) (Kaufmann et al. 2016; Park et al. 2010; Fedorikhin, Park, and Thomson, 2008).

So far, we have differentiated the preowned luxury from vintage and counterfeit luxury. Apart from them, the preowned luxury also resembles to downscale extensions of luxury brands with its higher accessibility due to lower prices. Next, we elaborate how they might differ from each other, and we present findings from the pilot study we conducted to examine whether the preowned luxury products decrease customers' brand attachment.

3.2 Is Preowned similar to Downscale Extensions?

The symbolic value of brand names is well-established (Belk, 1988; Solomon, 1983), and prior research shows that possessions are a source of inference-making about their owners (Erdem and Swait, 1998; Richins, 1994; Belk, Bahn, and Mayer, 1982; Burroughs, Drews, and Hallman, 1991). Affluence as revealed in consumption of luxury brands is one of the most prominent signals of social status (Han et al., 2010; Bagwell, and Bernheim, 1996). Consumption of luxury products signals customers' status and values by proving the consumer is able to afford the exclusivity (Iglesias et al., 2011; Truong, McColl, and Kitchen, 2009; Nia & Zaichkowsky, 2000). As shown in the prior literature on signaling, a luxury product is a costly signal due to its high price, and this is one of the ways to secure exclusivity for luxury brands (Connelly et al., 2011; Netemeyer et al., 2004, Kirmani & Rao, 2000; Quelch, 1987). Luxury customers do not get discouraged by high price premiums as long as they attribute a signaling value to the brand based on exclusivity.

The availability and affordability of luxury products, however, may increase as a result of a competitive market environment, shifting economic conditions, and new technologies. In order to reach price-sensitive customers, luxury brands may introduce downscale extensions at lower levels of price and quality (Pitta and Katsanis, 1995). Previous literature shows that downscale extensions carry the risk of generating negative spillovers on existing customers' brand perceptions (He, Chen, Tam, and Lee, 2016; Keller and Sood, 2003). Luxury brands face with such negative spillover effects more severely than non-luxury brands (Albrecht et al., 2013), because low pricing is inconsistent with luxury attributes (Loken and Roedder, 1993). The signaling value derived from a luxury brand decreases when the proportion of lower-class customers in the total customer base of that brand increases (Kuksov and Xie, 2012).

Similar to downscale extensions, the preowned luxury market appeals to a greater audience with less expensive product offerings than the ones in regular market. Preowned products offered at lower prices may well decrease the benefit of exclusivity offered, thereby lowering current consumers' attachment to the brand as a status signal. However, one of the

ways the preowned luxury is different than downscale extensions is that the preowned luxury refers to relatively older seasons products that are in use for some time. Thus, they might be relatively weaker in terms of the damage to the exclusivity of customers who purchase new season products. Despite the brand's higher accessibility in the preowned market, luxury customers are still the only segment carrying its latest fashion items. Therefore, speculate that the preowned market does not affect customers' brand attachment.

Pilot Study 2

We recruited a U.S. national sample using Qualtrics online panel. Our sample consisted of two hundred and fifty-nine respondents. The average age of the respondents was 52. 81% of respondents were female. We divided our sample into two: customers of luxury and noncustomers. We made this division based on the self-reported answer respondents gave to the following sentence: Please indicate whether you have purchased a Coach product in the following apparel categories in the past two years: clothing, bag, shoes, or accessories. Please see the stimuli section for the justification of the selection of Coach brand as our focal luxury brand.

Luxury customers. 97 of total respondents were customers of luxury brand Coach. 82 of them have used luxury brands other than Coach as well. 58 of Coach customers have purchased preowned products before. Their yearly income was \$176,556 on average.

Non-customers. 162 of total respondents have never used a Coach product before. 51 of them have used luxury brands other than Coach. 43 of them have purchased preowned products before. Their yearly income was \$113,208 on average.

All respondents needed to be over 18 years of age. No identifiers such as name or address were collected. IRB approval was obtained from the authors' universities. The study was a 2 (brand ownership: customers, noncustomers) \times 2 (product line: regular, preowned) between-subjects design. We manipulated market strategy and measured brand ownership based on whether they had previously owned the focal brand.

Stimuli. Luxury branding research has commonly used the brand Coach (Bastien and Kapferer, 2013; Cailleux, Mignot, and Kapferer, 2009; Phau et al., 2013; Wilson and Robson, 2019), making it a credible brand to employ in studies on preowned luxury. Furthermore, Coach is associated with accessible luxury with a reasonable price premium

and high prestige (Schlossberg, 2017; Truong et al., 2009). According to U.S consumers, it is a luxury brand with greater availability in the market than other luxury brands such as Gucci, Louis Vuitton, Chanel, and Hermès (Doss and Robinson, 2018). Therefore, we used Coach in our stimuli. We manipulated type of line by showing all the respondents an ad for a new Coach bag (control group, regular line), a preowned bag (preowned), a cheaper but new bag (downscale extension). See web appendix.

After reviewing the ad stimuli, respondents completed the brand attachment scale (Sen et al., 2015), indicating their agreement with the following statements on a seven-point scale: I would feel better if I am not without it for a long time. I miss it when it is not around. If it is permanently gone from my life, I would become upset. Losing it forever would be distressing for me. The items were highly interrelated ($\alpha = .911$). We controlled for respondents' prior experience with the preowned market by asking whether they have previously purchased a preowned product or not. We also controlled whether they have purchased apparel products from other luxury brands in the past two years.

Results and Discussion. We analyzed the data using PROCESS Procedure SPSS Version 3.3. Bootstrap confidence intervals (CI) calculated by PROCESS do not require normality of the sampling distribution (Hayes, 2012).

In model 1, brand attachment served as the dependent variable, brand ownership as the independent variable, and line as the moderator. The overall model was significant ($F(5, 253) = 25.02, p < .001, R^2 = .58$). The main effect of brand ownership was not significant ($b = -.62, SE = 1.29, t(253) = -.48, p = .629$). The main effect of line was not significant ($b = .31, SE = .63, t(253) = .50, p = .619$). The main effect of prior preowned purchase experience was significant ($b = -.70, SE = .20, t(253) = -3.43, p < .000$). The main effect of ownership of other luxury brands was significant ($b = -.45, SE = .22, t(253) = -2.07, p = .040$). The two-way interaction between brand ownership and line was not significant ($b = -.21, SE = .37, t(253) = -.58, p = .563$). We further probed the results of the two-way interaction (customers: $M_{\text{preowned}} = 4.03, M_{\text{regular}} = 4.18, F(1, 253) = .113, p = .737$ and noncustomers: $M_{\text{preowned}} = 2.35, M_{\text{regular}} = 2.18, F(1, 253) = .262, p = .609$). Results from the pilot study shows that the preowned market does not have an effect on customers' brand attachment.

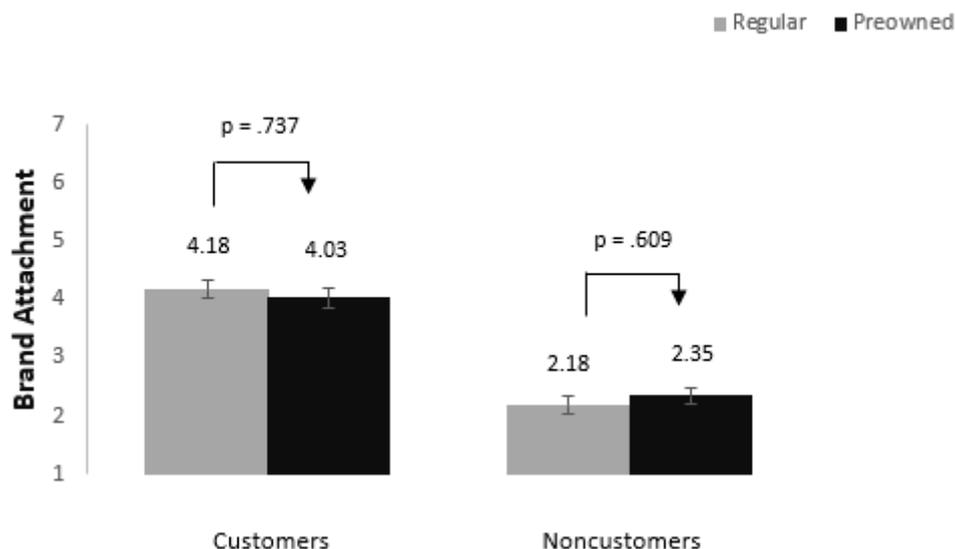


Figure 3.1 Effect of the preowned luxury on brand attachment.

Next, we go into the market specific characteristics of the preowned luxury: product type and appeals. First, we elaborate on distancing theory and speculate on why product type in the preowned market i.e., from older or recent seasons, affects customers' brand attachment. Following that, we investigate how customers' brand attachment is affected by the appeals used in the preowned market and why.

3.3 Product Type in the Preowned Market

The availability of lower-priced options may hurt brands in two ways: cannibalizing current sales and tarnishing the prestige of the brand name (Keller and Aaker 1992). The latter is a key concern especially for luxury brands. Hennigs et al. (2013) argue that greater availability of luxury brands damages their characteristic properties such as exclusivity and uniqueness. Marketers of luxury brands also tend to believe that it decreases demand for their products. However, the conditions under which this effect is valid are not very clear (Amaldoss and Jain 2005). Previous research suggests that luxury brands can utilize distancing techniques in order to protect their status image and hence decrease the negative spillover effects of their lower-priced offerings (Park, Milberg, and Lawson, 1991; Monga and Roedder, 2010).

Distancing refers to a clear separation between the current brand and the new product being introduced using techniques including a different brand name, different ad strategies or different designs (Hsu, Fournier and Srinivasan, 2016). The concept also captures perceptions of low fit (Keller and Aaker 1992).

Distancing helps mitigate consumer perceptions of inconsistencies by creating a buffer zone between the core brand and the new product (Kim et al. 2001), thereby reducing the transfer of brand associations (Pitta and Katsanis 1995). A high distance between lower-priced options and the brand facilitates the formation of a subcategory and limits the negative impact of incongruent information from lower pricing on the brand schema (Gürhan-Canli and Maheswaran 1998).

One of the distancing techniques is limiting the preowned market offerings to a distinct subset of products that are visually and aesthetically distinct from the regular market offerings. For example, a preowned product that is from a relatively older season allows consumers to maintain their ability to use current-season luxury products as status signals, thus maintaining their value derived from luxury brands. Such older season products are likely to be categorized distinctly and more likely to be viewed as a separate subtype of the luxury products. We argue that having a distinct subset of products which are unique in the preowned market will have a lower negative spillover effect on overall brand equity. Thus:

H1: Recent (vs. older) season products in the preowned market will result in lesser (vs. greater) brand attachment for customers.

So far, we have argued that the preowned market does not generate negative spillover effects on luxury customers' brand attachment as long as the products are from older seasons. While the preowned market does not damage customers' brand attachment, is it possible for luxury brands to utilize it to acquire new segments of customers as well as to strengthen the brand attachment of existing customers? Next, we elaborate on one of the potential ways to do it.

3.4 Appeal Type in the Preowned Market

Advertising appeals for luxury brands highlight customers' status by emphasizing product superiority, selective distribution, exclusivity, uniqueness, elitism, glamor and fashion (Kapferer and Valette-Florence, 2016; Fuchs, Prandelli, Schreier and Dahl, 2013). However, there is no prior evidence on what type of appeals are used in the preowned luxury market. We conducted a pilot study to discover the type of such appeals.

Pilot study 3

We conducted the pilot study reviewing 30 preowned luxury retailers for the appeals they

use as well as their pricing levels. We used the “Louis Vuitton monochrome tote bag” as an example product for the price comparisons. We chose this particular brand and the apparel item because of its availability across a wide range of preowned retailers. We observed two main appeals: sustainability and affordability (table 3.1). Consider, for example, the sustainability appeal retrieved from The RealReal website: “A Sustainable Luxury Company. Honoring heritage brands and extending the lifecycle of luxury items”. Also consider the affordability appeal retrieved from Vestiaire Collective website: “Discover our selection of luxury and premium items at up to 70% off retail price”. We observe no significant price difference between the appeal types: the average price for the sustainability appeal was \$1,195, and the average price for the affordability appeal was \$1,152.

Table 3.1 Appeals and pricing levels.

Websites	Other Brands Offered	Appeal Type	Sales Price
The RealReal	Givenchy, Saint Laurent, Gucci, Celine, Michael Kors, Fendi	Sustainability	\$1,295
ThredUp	Roberto Cavalli, Stella McCartney, Balmain, Versace, Hermes, Celine, Chanel, Prada	Sustainability	\$1,100
LePrix	Saint Lauren, Balmain, Versace, Zanotti, Chanel	Sustainability	\$1,270
Poshmark	Chanel, Dolce Gabbana, Coach, Gucci, DKNY, GAP, Calvin Klein, Dolce Gabbana	Affordability	\$1,000
Stock X	Saint Lauren, Burberry, Hermes, Chanel	Affordability	\$1,400
Fashionphile	Damiani, Miu Miu, Christian Dior, Balenciaga	Affordability	\$1,130
Yoogi’s Closet	Moncler, Prada, Rick Owens, Valentino	Sustainability	\$1,300
Vestiaire Collective	Chanel, Valentino, Michael Kors, Prada, Dior, Yves Saint Lauren	Affordability	\$1,015
Rebag	Ralph Lauren, Chanel, Dior, Fendi	Affordability	\$1,215
Tradesy	Chloe, Hermes, Celine, Balenciaga	Sustainability	\$1,010

3.4.1 Appeals in the Preowned Market and Signaling Value

In order to signal status, luxury brands need to carry a symbolic meaning that communicates

about the customers' distinctiveness (Iglesias et al., 2011; Truong et al., 2009). Above we discussed that the preowned market damages luxury brands' signaling value. In this section, we argue that the appeals used for preowned products can attach a symbolic meaning to luxury brands, which may help them retain their signaling value.

There are two main appeals used in the preowned market: sustainability and affordability. Sustainability refers to the ability to satisfy the needs of society without causing any harm to the environment (Fletcher, 2008). In the current era, sustainability goes beyond only protecting environmental resources. Although symbolic values of luxury such as power, wealth, hedonism, and unnecessary are judged as contrasting with the ethics-based values of sustainability such as altruism, moderation, and caring for others (Berry, 1994; Kapferer and Michaut-Denizeau, 2014; Voyer and Beckham, 2014), social norms are now shifting toward sustainability (Winston, 2016). Sustainability driven practices have evolved to become the new status-related behavior and yet another form of conspicuous consumption (Wolfgramm and Conroy, 2011). Status signaling of sustainability appeal is premised not on ability to purchase on absolute terms, but rather on the cultivation provided by education and tastes that position consumers at a higher rank in social space (Elliot, 2013). Similarly, Holt (1998: 4) suggests that sustainability appeal in luxury consumption signals social status not because the products are rare but rather because they are ideationally appealing only to a particular segment of customers.

By contrast, the affordability appeal does not add a signal value to preowned products. The symbolic attributes of customers that are perceived to use a brand become associated with that brand (Escalas and Bettman, 2005; Amaldoss and Jain, 2005). Affordability appeal emphasizing brand's availability to a larger base of consumers; therefore, damages the brand's status image. Thus:

H2: Sustainability (vs. affordability) appeals will result in greater (vs. lesser) brand attachment for customers.

3.5 Mediating Mechanism: Ideal Self Concept Connection

Social identity theory suggests that individuals carry a sense of identity in two levels: individual identity or individual sense of self, and social identity or the sense of self formed within the environment and the groups one belongs to (Stets and Burke, 2000; Tajfel, 1984). Why do luxury customers desire exclusive brands? By signaling luxury brand ownership, consumers become a member of an exclusive group, one which symbolizes wealth and

status (Muniz and O'Guinn, 2001). According to prior literature, consumers' self-concept goals affects their positions within their social environment such as belonging to the groups related to their actual selves (Bearden and Etzel, 1982; Whittler and Spira, 2002), trying to fit in to aspirational groups (Escalas and Bettman, 2005) or avoiding groups that do not match any of their selves (White and Dahl, 2006). By purchasing a high priced luxury brand, and becoming a member of this exclusive group, consumers seek to affirm their ideal self-concept based on aspirational or ideal belongingness goals. Luxury consumption serves various needs of customers such as signaling that the owner belongs to a specific class and that she can afford to reveal her desired selves to others, which then facilitates self-concept connection with the brand.

Self-concept connection refers to linkage between the brand and the customers' self-concept (Escalas and Bettman, 2003). When consumers see aspects of themselves represented by the brand, they build strong self-concept connection (Park et al., 2010). Brands use both actual and ideal self-concepts to build relations with existing customers as well as to receive attention from potential ones (Malär, Krohmer, Hoyer, & Nyffenegger, 2011). The ideal self represents attributes a consumer desire to own (Higgins et al., 1994). It has the most important effects on luxury brands as such brands carry symbolic values (Brun et al., 2013). The value of a luxury brand comes from the prevalence of more desirable groups of people among its customers (Han et al., 2010). Therefore, customers of luxury tend to purchase luxury brands which represent their ideal selves (Nguyen, Wu, and Chen, 2017). Brand relationships also improve when the strong linkage between the brand and customers' self-concept, resulting in enhanced emotional connection with the brand (Malär et al., 2011). Customers' brand attachment increases as their self concept connection gets stronger (Japutra, Ekinici, and Simkin, 2019).

Traditionally, the ideal self has been related to possessions that convey wealth and power, yet their role in forming customers' ideal self is currently changing. Now, brands and products alone are not considered sufficient to appeal to customers' ideal selves, specific values that form customers' ideal selves need to be embedded in products as well (Eirini and George, 2017). Customers of luxury now believe that being sustainable is a major indication of luxury (Bevolo, Gofman, and Moskowitz, 2009). On the marketers side, sustainability has become one of the strategic value drivers luxury brands use in order to build and enhance connection with their customers' selves (Eirini and George, 2017). Therefore, we suggest that a sustainability appeal will result in higher brand attachment through increased ideal self concept connection. Thus:

H3: The effect of appeal type on customers' brand attachment will be mediated by their ideal self concept connection.

3.5.1 Alternative Mediation Routes

Previous research shows that luxury consumption is driven by social attitude functions (Shavitt, Lowrey, and Han, 1992). Social attitude functions are divided into two parts: social adjustive functions and value-expressive functions. Value expressive attitude (VEA) indicates a tendency to make consumption decisions to express self-identity, beliefs and values. It prompts an articulation of customer's own values rather than the values of reference groups (Katz, 1960). Customers who have strong VEA toward a brand prefer to use that brand to express their self. Their main aim is to communicate their self-identity regardless of the extent to which it is in line with the expectation of others (Shavitt, 1990; DeBono, 1987). For example, they choose to purchase Coach because the brand reflects their self-identity and values, not because it is exclusively a status symbol. Thus, the effect of appeal for customers may depend on the extent to which appeals align with their self-identity, beliefs and values.

Customers' social adjustive attitude (SAA), on the other hand, indicates a tendency to make consumption decisions to maintain social relationships and gain approval. Bearden, Netemeyer and Teel (1989) argue that SAA is closely linked to the need to conform the norms and values of others. Consumer with SAA choose luxury brands to signal a desired public image and hence gain the approval in their social environment (Wilcox, Kim, and Sen, 2009). Thus, the effect of appeal for customers may depend on the extent to which appeals facilitate their social relationships. We examine these routes for exploratory reasons without specific hypotheses.

3.6 Study 1

In study 1, we tested our hypothesis regarding how the preowned product type affects customers' brand attachment. We expected that recent (vs. older) season products will result in lesser (vs. greater) brand attachment for customers (hypothesis 1).

3.6.1 Method

Three hundred seventy students participated the study conducted in the behavioral lab of a large public university in the United States. All students attending the university's business

school were invited to participate in the experiment via e-mail. IRB approval was obtained for the study. Each respondent was given \$6 cash at the end of the experiment as compensation for taking part in the study. The average age of the respondents was 20. 49% of respondents were female. We divided our sample into two: customers of luxury and noncustomers, in the same fashion as in Pilot Study 2.

Luxury customers. 140 of total respondents were customers of luxury brand Coach. 127 of them have used luxury brands other than Coach. 108 of them have purchased preowned products before. Their yearly income was \$102,816 on average.

Non-customers. 230 of total respondents have never used a Coach product before. 154 of them have used luxury brands other than Coach. 204 of them have purchased preowned products before. Their yearly income was \$90,576 on average.

The age of respondents needed to be over 18. No identifiers such as name, address or student number were collected. We analyzed the data in aggregate. The study was a 2 (brand ownership: customer, noncustomer) \times 2 (season: older vs. recent) between-subjects design. We manipulated season and measured brand ownership based on whether or not they had previously owned a Coach apparel product. For all respondents, we manipulated season by indicating that a preowned Coach bag available was either from the 2018 spring collection (recent season, low distancing) or from the 2010 spring collection (older season, high distancing). After reviewing the ad, respondents completed the brand attachment scale. As in previous studies, we controlled for the ownership of other luxury brands and whether respondents have previously purchased a preowned product.

3.6.2 Results and Discussion

We used PROCESS procedure SPSS Version 3.3. In model 1, brand attachment served as the dependent variable, brand ownership as the independent variable, and season as the moderator. The overall model was significant ($F(5, 364) = 5.91, p < .001, R^2 = .08$). The main effect of brand ownership was significant ($b = -.28, SE = .07, t(364) = -4.02, p < .000$). The main effect of season was not significant ($b = -.04, SE = .13, t(364) = -.29, p = .775$). The interaction between brand ownership and season was significant ($b = -.37, SE = .14, t(364) = -2.71, p = .007$). The main effect of prior preowned purchase experience was not significant ($b = .15, SE = .18, t(364) = .85, p = .398$). The main effect of the ownership of other luxury brands was not significant ($b = -.06, SE = .16, t(364) = -.38, p = .702$). We

further probed the results of the two-way interaction. Simple effects of season on brand attachment were significant both for customers ($M_{\text{recent}} = 2.37$, $M_{\text{older}} = 2.79$; $F(1, 364) = 3.83$, $p = .051$) and for noncustomers ($M_{\text{recent}} = 2.17$, $M_{\text{older}} = 1.86$; $F(1, 364) = 3.61$, $p = .058$).

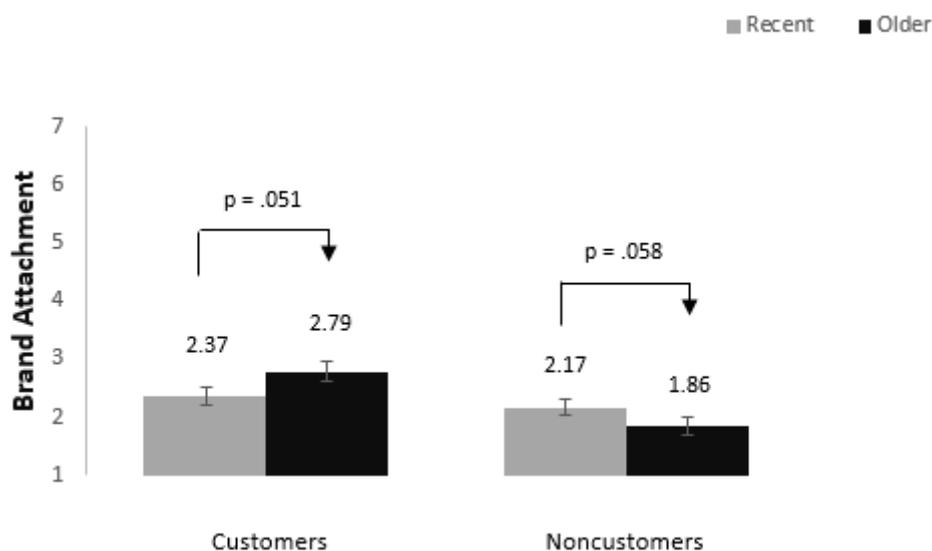


Figure 3.2 Effect of product type on brand attachment.

The results from study 1 show that recent (vs. older) season products in the preowned market result in lesser brand attachment for brand customers. Our findings are consistent with H1. Noncustomers' brand attachment, however, decreases when older season products are offered.

3.7 Study 2

In study 2, we investigate the effect of appeals on brand attachment. We expect that a sustainability (vs. an affordability) appeal will result in greater (vs. lesser) brand attachment for customers (hypothesis 2) and this effect will be mediated by ideal self concept connection (hypothesis 3).

3.7.1 Method

We recruited a U.S. national sample using Qualtrics online panel. Our sample consisted of two hundred and forty-eight respondents (81% female). Our focal brand was Coach. We asked respondents to indicate whether they had purchased a Coach product in the following apparel categories in the past two years: clothing, bag, shoes, or accessories.

Luxury customers. 96 of total respondents were customers of luxury brand Coach. 93 of

them have used luxury brands other than Coach. 74 of them have purchased preowned products before. Their yearly income was \$143,436 on average.

Non-customers. 152 of total respondents have never used a Coach product before. 54 of them have used luxury brands other than Coach. 151 of them have purchased preowned products before. Their yearly income was \$146,592 on average.

All respondents needed to be over 18 years of age. The average age of the respondents was 46. No identifiers such as name or address were collected. IRB approval was obtained from the authors' universities. The study was a 2 (brand ownership: customer, noncustomer) \times 2 (appeal: affordability, sustainability) between-subjects design. We manipulated appeal type and measured brand ownership. We manipulated appeal type by showing all respondents an ad of a preowned Coach bag, titled with either "Preowned goods for lower prices" or "Preowned goods for sustainability". Respondents completed the brand attachment scale as in the previous study. Then they completed the ideal self concept connection scale derived from Swaminathan, Page and Gurhan-Canli (2007) indicating their agreement with the following statements on a seven-point scale: It says a lot about the kind of person I would like to be. It is a statement of who I want to be. The items were highly interrelated ($\alpha = .923$). We removed 12 respondents using Cook's D outlier analysis (Cook's $D < .017$). As in previous studies, we controlled for the ownership of other luxury brands and whether respondents have previously purchased a preowned product.

3.7.2 Results and Discussion

We used model 1, with brand attachment as the dependent variable, brand ownership as the independent variable, and appeal as the moderator. . The overall model was significant ($F(5, 230) = 23.28, R^2 = .34, p < .001$). The main effect of brand ownership was significant ($b = -1.36, SE = .19, t(230) = -7.04, p < .001$). The main effect of appeal was not significant ($b = -.24, SE = .17, t(230) = -1.47, p = .144$). The two-way interaction between brand ownership and appeal was not significant ($b = .54, SE = .35, t(230) = 1.56, p = .120$). The main effect of prior preowned purchase experience was not significant ($b = .30, SE = .66, t(230) = .46, p = .647$). The main effect of the ownership of other luxury brands was significant ($b = -.77, SE = .19, t(230) = -4.14, p < .000$). We further probed the results of the two-way interaction. Simple effects of appeal on brand attachment were significant for customers ($M_{\text{sustainability}} = 3.83, M_{\text{affordability}} = 3.24; F(1, 230) = 4.48, p = .035$) but not for noncustomers ($M_{\text{sustainability}} = 2.19, M_{\text{affordability}} = 2.14; F(1, 230) = .05, p = .827$). Our findings are consistent

with H2.

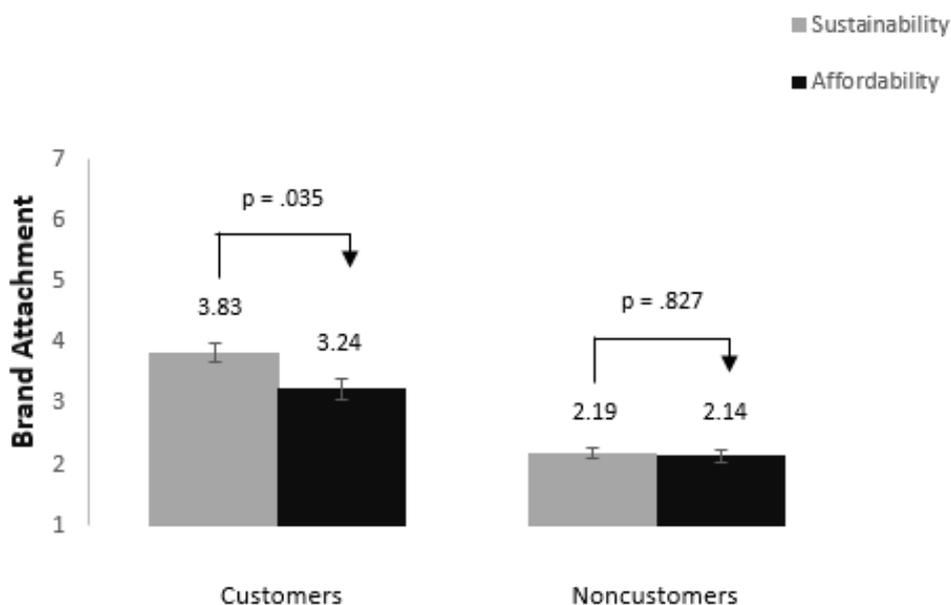


Figure 3.3 Effect of appeal on brand attachment.

Mediation analysis

We run regression analysis with ideal self concept connection as the dependent variable and brand ownership, appeal, and their interaction as independent variables. We controlled for the ownership of other luxury brands and whether respondents have previously purchased a preowned product. The overall model was significant ($F(5, 230) = 24.35, R^2 = .35, p < .001$). The results reveal a significant main effect of brand ownership ($b = -1.77, SE = .21, t(230) = -8.35, p < .000$). The main effect of appeal was not significant ($b = -.29, SE = .19, t(230) = -1.55, p = .124$). The two-way interaction between brand ownership and appeal was significant ($b = .74, SE = .38, t(230) = 1.94, p = .054$). The main effect of prior preowned purchase experience was not significant ($b = .58, SE = .72, t(230) = .80, p = .422$). The main effect of the ownership of other luxury brands was significant ($b = -.52, SE = .20, t(230) = -2.53, p = .012$). Next, we tested the slopes of brand ownership in each appeal condition. The slopes were significant only with customers (customers: $b = -.63, SE = .75, t(230) = -2.46, p = .015$; noncustomers: $b = .37, SE = .23, t(230) = -.050, p = .960$). More specifically, simple effects were significant for customers ($M_{\text{sustainability}} = 4.41, M_{\text{affordability}} = 3.66; F(1, 230) = 6.07, p = .015$) but not for noncustomers ($M_{\text{sustainability}} = 2.26, M_{\text{affordability}} = 2.24; F(1, 230) = .00, p = .960$).

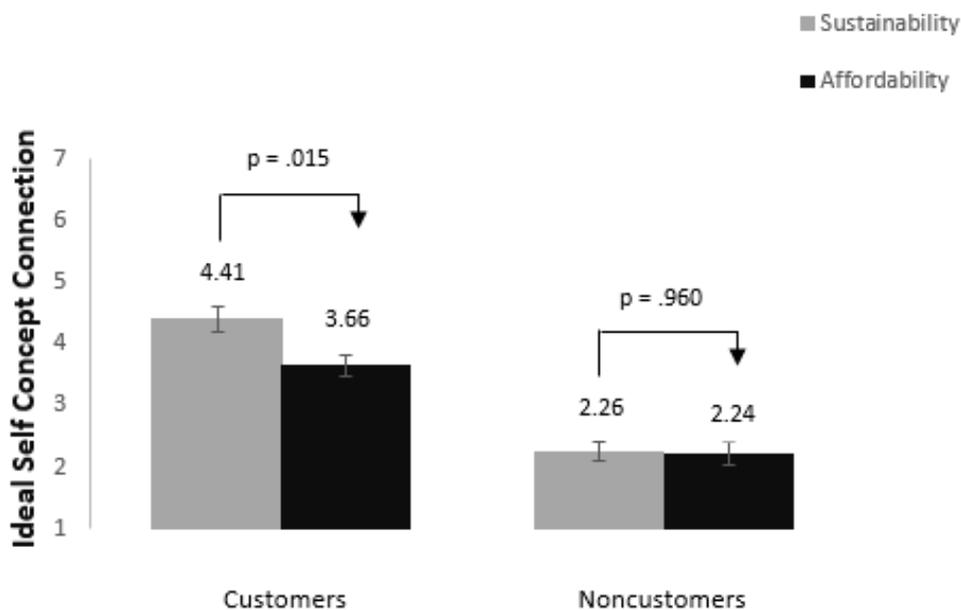


Figure 3.4 Effect of appeal on ideal self concept connection.

We tested the indirect effect of appeal on brand attachment through customers' ideal self concept connection. We used Process Macro Version 3.3. In model 7, appeal served as the independent variable, brand ownership as the moderator, ideal self concept connection as the mediator, and brand attachment as the dependent variable. As before, we control respondents' prior preowned purchases as well as their prior luxury purchases. Conditional effects of appeal were significant for customers (95% CI: $-1.3561, -.1507$; $b = -.75$, $SE = .31$), but not for non-customers (95% CI: $-.4715, .4482$; $b = -.01$, $SE = .23$). Therefore, the indirect effect of ideal self concept connection on brand attachment was significant for customers (95% CI: $-.8590, -.0765$; $b = -.47$, $SE = .20$), but not for non-customers (95% CI: $-.2822, .2752$; $b = -.01$, $SE = .14$).

The results from study 2 show that a sustainability appeal results in greater brand attachment than an affordability appeal among brand customers, and this effect is mediated by ideal self concept connection. Our findings are consistent with H3.

We tested two alternative mediation routes as well. Neither social adjustive function nor value expressive function mediated the effect; social adjustive function: customers (95% CI: $-.5660, .0566$; $b = -.25$, $SE = .16$), non-customers (95% CI: $-.2129, .3052$; $b = .05$, $SE = .13$), value expressive function: customers (95% CI: $-.7424, .0259$; $b = -.37$, $SE = .19$), non-customers (95% CI: $-.1460, .3837$; $b = .12$, $SE = .13$).

3.8 General Discussion

Our research approaches the preowned market from the perspective of customers of brand-new luxury products, which has been neglected by literature so far. Luxury brands are now taking steps into new marketing practices that appeal to a broader customer base, one of which is involvement in the preowned market. They are no longer beyond reach for consumers that are not very financially affluent. In this essay, we investigate how the preowned market affects luxury customers' brand attachment. We also provide insights for how the preowned market can help luxury brands strengthen ideal self-concept connection with their customers and thus enhance their brand attachment.

3.8.1 Theoretical and Managerial Implications

First, we show that preowned luxury differs from counterfeiting in receiving distinct emotional responses from luxury customers. Second, we show that unlike downscale extensions, the preowned market does not decrease existing customers' brand attachment. Yet, it is not always so. Customers' brand attachment decreases when recent season products are available in the preowned market. We speculate that the underlying reason is the decreased perception exclusivity offered by the brand. Third, we suggest luxury brands can overcome the risk of decreased exclusivity and turn the preowned market into an advantage by adding a signaling value to the preowned products. More specifically, we show that customers' brand attachment increases with sustainability appeals, and this effect is mediated by their ideal self concept connection.

Overall, we find that luxury brands' availability in the preowned market does not generate a negative effect on luxury brands. When well-managed, it is a way to acquire new customers while retaining existing customers. Controlling certain attributes such as product type and appeal type can help increase customers' brand attachment via stronger ideal self-concept connection., while at the same time lower prices attracts price-sensitive customers. To benefit from the preowned market, we suggest luxury brands implement strategies mainly on sustainability where their customers look for the realization of their ideal selves.

The findings provide preliminary implications for developing effective strategies in the preowned luxury market. It is still an emerging market, and early movers can move ahead of their competitors by taking the right steps. Unlike other strategies that decrease exclusivity and thus generate detrimental effects on luxury brands, the preowned market provides a chance to increase customers' brand attachment.

3.8.2 *Limitations and Future Research*

The findings are subject to some limitations. First, the selection of luxury customers was based on respondents' answer to the question whether they had purchased a Coach product in the following apparel categories in the past two years: clothing, bag, shoes, or accessories. While this selection criterion might not fully cover the concept of luxury brand customer, future research, especially field studies, would be needed. Second,, it is likely that the data collection process suffers from self-selection bias. Luxury brand customers who chose to participate in this study (vs. luxury brand customers who did not choose to participate) may carry differences in areas that would be relevant to our study, such as their perception of luxury, brand attachment, or even openness to new experiences. Being a customer of a luxury brand (vs. not) should be manipulated in future studies so that the possible effects of self-selection bias can be eliminated. Moreover, results from Study 1 rely on a nonprobability sample gathered among the students at the University of Pittsburgh. Although they use luxury products, they may not behave as other luxury customers in the market, who are adults with regular income. Lastly, our studies lack control conditions to observe the baseline effects, which is important to capture more comprehensive insights about the market and customers.

Examining whether a broader set of appeals may create positive outcomes for both existing customers and noncustomers is a fruitful avenue for future research. Possible interactions between brand personality and appeal type can offer additional novel insights. We find that distancing can mitigate some of the negative spillover of preowned products to existing customers using product season as a way to operationalize distance. Further research could distinguish other ways for the preowned market to create distancing through choice of product type such as apparel or electronics and platform type such as third party sellers vs. brand as the seller. Our process mechanism highlights the important role of ideal self-concept connection as a mediator; however, additional mechanisms by which the preowned market may affect customers across different segments deserve further examination.

Moreover, our findings have shown that the ownership of luxury brands other than Gucci has a significant effect on customers' brand attachment as well. Although cross competition and ownership of several luxury brands is not the main concern in this essay, we speculate that it signals the cumulative power of the preowned market. Therefore, it is likely that a luxury brand can still benefit from the existence of the preowned market although it is not available there with their own branded products. This might be a safe option for brands such

as Louis Vuitton who strictly wants to stay out of the preowned market. Brand managers of such brands may still choose not to be present in the preowned market, yet let and support other brands to be there. Future research may look at this and shed light on the spillover effects of the preowned market on other luxury brands as well.

Lastly, the spillover effects of the preowned market are likely to occur in other areas as well such as willingness to pay, purchase intentions or word of mouth. Although brand attachment is a key indicator for such downstream outcomes, future research is needed to measure the effects.



Chapter 4

CONCLUSION

Social norms are shifting, and sustainable is the new cool. This dissertation investigates frugality and frugal consumer behavior within the framework of sustainability.

Essay 1 explores the dimensions of frugality. Despite the late attention paid to the role of frugality in consumer behavior, research findings are inconsistent likely because of the variations in conceptualizations, which makes understanding of frugality's relationship to proenvironmental behavior difficult. To the best of our knowledge, an overarching model that differentiates and integrates distinct conceptualizations of frugality has been not provided by previous literature. Frugality has only been conceptualized as a unidimensional trait variable and explored it during either pre-consumption or post-consumption stages of consumer behavior. We argue that frugal consumer behavior incorporates all stages of consumer behavior—before, during, and after consumption—and indicates different behavioral inclinations: careful use of money (spending-related frugality) and careful use of goods (consumption-related frugality). Accordingly, we develop and validate two distinct dimensions of consumer frugality—SRF and CRF—and test their consequential effects in relation to the 3R model of consumption. Findings suggest that only CRF is positively correlated with the 3R consumer behavior.

Essay 2 elaborates on the preowned luxury market and investigates its effects on luxury brands. Due to changing market dynamics and technological developments, the traditional attributes of luxury brands such as exclusivity and high pricing are getting less pronounced in luxury consumption. Owners of luxury products are now provided with several venues to sell their products such as online and offline consignment stores as well as mobile applications. In return, consumers who may not afford brand new luxury get the opportunity to own, experience and -if they prefer, to resell preowned luxury products. Essay 2 investigates whether this phenomenon damages luxury customers' brand attachment, and if not, why. It further proposes ways for luxury brand managers to navigate through the preowned luxury market. Findings suggests that the preowned market does not decrease existing customers' brand attachment as long as the available products are not from recent seasons. Moreover, customers' brand attachment increases with a sustainability (vs. affordability) appeal. The effect mediated by customers' ideal self concept connection.

Overall, this dissertation contributes to the literature by exploring dimensions of frugality and 3R model of consumption, and by specifically investigating the dynamics of the preowned market from the perspective of luxury customers.



BIBLIOGRAPHY

- Albinsson, P. A., Wolf, M., & Kopf, D. A. (2010). Anti-consumption in east Germany: Consumer resistance to hyper-consumption. *Journal of Consumer Behaviour*, 9(6), 412-425.
- Albrecht, C. M., Backhaus, C., Gurzki, H., & Woisetschlager, D. M. (2013). Drivers of brand extension success: What really matters for luxury brands. *Psychology & Marketing*, 30(August), 647-659.
- Alcott, B. (2008). The sufficiency strategy: Would rich-world frugality lower environmental impact? *Ecological Economics*, 64(4), 770-786.
- Alford, B. L., & Biswas, A. (2002). The effects of discount level, price consciousness and sale proneness on consumers' price perception and behavioral intention. *Journal of Business Research*, 55(9), 775-783.
- Amaldoss, W., & Jain, S. (2005). Pricing of conspicuous goods: A competitive analysis of social effects. *Journal of Marketing Research*, 42(February), 30-42.
- Amatulli, C., Pino, G., Angelis, M., & Cascio, R. (2018). Understanding purchase determinants of luxury vintage products. *Psychology and Marketing*, 35(August), 616-624.
- Apple (2020). Apple environmental progress report. https://www.apple.com/environment/pdf/Apple_Environmental_Progress_Report_2020.pdf.
- Arnould, E. J. (2003). Special Session Summary A good to the Last Drop@: Perspectives on Thrift and Frugality. *ACR European Advances*.
- Awais M., Samin T., Gulzar M. A., Hwang J., & Zubair, M. (2020). Unfolding the association between the big five, frugality, e-mavenism, and sustainable consumption behavior. *Sustainability*, 12, 490.
- Aycock, M. B. (2021). *Consumer motivations and perceived value in online second-hand luxury fashion shopping*, Doctoral Dissertation, University of Arkansas.
- Bagwell, L. S., & Bernheim, D. (1996). Veblen effects in a theory of conspicuous consumption. *The American Economic Review*, 349-373.
- Ballantine, P. W., & Creery, S. (2010). The consumption and disposition behaviour of voluntary simplifiers. *Journal of Consumer Behaviour*, 9(1), 45-56.
- Bardhi, F. (2003). Thrill of the hunt: Thrift shopping for pleasure. In P. A. Keller & D. W. Rook (Eds.), *Advances in consumer research* (Vol. 30, pp. 375-376). Valdosta, GA: Association for Consumer Research.
- , & Arnould, E. J. (2005). Thrift shopping: Combining utilitarian thrift and hedonic treat benefits. *Journal of Consumer Behaviour*, 4(4), 223-233.
- Barnes, L., & Lea-Greenwood, G. (2018). Pre-loved? Analysing the Dubai luxe resale market. In D. Ryding, C. Henninger, & M. Blazquez Cano (Eds.), *Vintage luxury fashion* (pp. 63-78). Cham: Palgrave Macmillan.
- Bastien, V., & Kapferer, J. N. (2013). More on luxury anti-laws of marketing. In K.P. Wiedmann, & N. Hennigs (Eds), *Luxury Marketing* (pp. 19-34), Wiesbaden: Gabler Verlag.
- Bearden, W. O., Money, R. B., & Nevins, J. L. (2006). A measure of long-term orientation: Development and validation. *Journal of the Academy of Marketing Science*, 34(3), 456-467.
- , & Etzel, M. (1982). Reference group influence on product and brand purchase decisions. *Journal of Consumer Research*, 9(September), 183-194.

- , Netemeyer, R. G., & Teel, J. E. (1989). Measurement of consumer susceptibility to interpersonal influence. *Journal of Consumer Research*, 15(March), 473–481.
- Belk, R. W. (1995). Collecting as luxury consumption: effects on individuals as households. *Journal of Economic Psychology*, 16(September), 477–490.
- (1988). Possessions and the extended self. *Journal of Consumer Research*, 15(September), 139–168.
- (1985). Materialism: Trait aspects of living in the material world. *Journal of Consumer Research*, 12, 265–280.
- , Ger, G., & Askegaard, S. (2003). The fire of desire: A multisited inquiry into consumer passion. *Journal of Consumer Research*, 30(3), 326–351.
- , Sherry J. F. Jr., & Wallendorf, M. (1988). A naturalistic inquiry into buyer and seller behavior at a swap meet. *Journal of Consumer Research*, 14 (March), 449–70.
- , Bahn, K. D., & Mayer, R. N. (1982). Developmental recognition of consumption symbolism. *Journal of Consumer Research*, 9(January), 4–17.
- Berry, C. J. (1994). *The idea of luxury: a conceptual and historical investigation*. New York: Cambridge University Press.
- Bevolo, M., Gofman, A., & Moskowitz, H. (2009). Sustainability, higher margin opportunities and economic crises: lessons from the global study of premium products. *ESOMAR World Research Paper*, presented at ESOMAR Congress September.
- Birkner, C. (2013). Thrifty Brits: Economic austerity in the UK has given rise to a more frugal British consumer. *Marketing News*, August 8.
- Biswas, A., Licata, J. W., McKee, D., Pullig, C., & Daughtridge, C. (2000). The recycling cycle: An empirical examination of consumer waste recycling and recycling shopping behaviors. *Journal of Public Policy & Marketing*, 19(1), 93–105.
- Black, I. (2010). Sustainability through anti-consumption. *Journal of Consumer Behaviour*, 9(6), 403–411.
- Bortoleto, A. P. (2014). *Waste prevention policy and behaviour: New approaches to reducing waste generation and its environmental impacts*. Routledge.
- Bove, L. L., Nagpal, A., & Dorsett, A. D. S. (2009). Exploring the determinants of the frugal shopper. *Journal of Retailing and Consumer Services*, 16(4), 291–297.
- , Liu, X., Burns, A. C., & Hou, Y. (2013). Comparing online and in-store shopping behavior towards luxury goods. *International Journal of Retail & Distribution Management*, 41(11/12), 885–900.
- Bryman, A. (2008). Why do researchers integrate/combine/mesh/blend/mix/merge/fuse quantitative and qualitative research. *Advances in Mixed Methods Research*, 21(8), 87–100.
- Burroughs, W. J., Drews, D. R., & Hallman, W. K. (1991). Predicting personality from personal possessions: A self-presentational analysis. *Journal of Social Behavior and Personality*, 6(January), 147–163.
- Cademan, A., Henriksson, R., & Nyqvist, V. (2012). The affect of counterfeit products on luxury brands: An empirical investigation from the consumer perspective.
- Cailleux, H., Mignot, C., & Kapferer, J. N. (2009). Is CRM for luxury brands?. *Journal of Brand Management*, 16(March), 406–412.
- Campbell, D. T., & Fiske, D. W. (1959). Convergent and discriminant validation by the multitrait-multimethod matrix. *Psychological Bulletin*, 56(2), 81.
- Cervellon, M. C., Carey, L., & Harms, T. (2012). Something old, something used: Determinants of women's purchase of vintage fashion vs second-hand fashion. *International Journal of Retail & Distribution Management*. 40 (November), 956–74.

- Chancellor, J., & Lyubomirsky, S. (2014). Money for happiness: The hedonic benefits of thrift. In M. Tatzel (Eds.), *Consumption and well-being in the material world* (pp. 13-47). Dordrecht: Springer.
- Conke, L. S. (2018). Barriers to waste recycling development: Evidence from Brazil. *Resources, conservation and recycling*, 134, 129-135.
- Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. (2011). Signaling theory: A review and assessment. *Journal of Management*, 37(January), 39-67.
- Connolly, J., & Prothero, A. (2003). Sustainable consumption: consumption, consumers and the commodity discourse. *Consumption, Markets and Culture*, 6(4), 275-291.
- Cordell, V. V., Wongtada, N., & Kieschnick Jr, R. L. (1996). Counterfeit purchase intentions: role of lawfulness attitudes and product traits as determinants. *Journal of Business Research*, 35(January), 41-53.
- Corral-Verdugo, V., Mireles-Acosta, J. F., Tapia-Fonllem, C., & Fraijo-Sing, B. (2011). Happiness as correlate of sustainable behavior: A study of pro-ecological, frugal, equitable and altruistic actions that promote subjective wellbeing. *Human Ecology Review*, 18(2), 95-104.
- Creswell, J. W., & Poth, C. N. (2016). *Qualitative inquiry and research design: Choosing among five approaches*. Sage publications.
- Csikszentmihalyi, M. (2000). The costs and benefits of consuming. *Journal of Consumer Research*, 27(2), 267-272.
- Davies, I. A., Lee, Z., & Ahonkhai, I. (2012). Do consumers care about ethical-luxury?. *Journal of Business Ethics*, 106(March), 37-51.
- DeBono, K. G. (1987). Investigating the social-adjustive and value-expressive functions of attitudes: Implications for persuasion processes. *Journal of Personality and Social Psychology*, 52(February), 279.
- Deloitte (2020). Global powers of luxury goods 2019: The new age of fashion and luxury. (accessed on January 3, 2021), [available at: <https://www2.deloitte.com/content/dam/Deloitte/pa/Documents/consumer-business/2020/Luxury-Goods-2020.pdf>].
- De Young, R. (1986). Some psychological aspects of recycling: The structure of conservation satisfactions. *Environment and Behavior*, 18(4), 435-449.
- Doss, F., & Robinson, T. (2018). Perceptions of accessible, intermediate, and inaccessible luxury across selected handbag brands. *Journal of international marketing strategy*, 4(1).Eirini, K., & George, P. (2017). Lust for our better versions - the meta modern reality's roots and implications. *Sustainable Luxury Management*, Springer, 467-498.
- Durning, A. T. (1992). *How much is enough? The consumer society and the future of the earth*. New York: W.W. Norton & Company.
- Elliott, S. (2010). Will you be my frugal valentine? *The New York Times*, Jan. 28
- Erdem, T., & Swait, J. (1998). Brand equity as a signaling phenomenon. *Journal of Consumer Psychology*, 7(2), 131-157.
- Egol, M., Clyde, A., Rangan, K., & Sanderson, R. (2010). *The new consumer frugality: Adapting to the enduring shift in US consumer spending and behavior*. Booz & Company. <https://www.strategy-business.com/article/00023>
- Escalas, J. E., & Bettman, J. R. (2003). You are what they eat: the influence of reference groups on consumers' connections to brands. *Journal of Consumer Psychology*, 13(December), 339-348.
- , & ——— (2005). Self-construal, reference groups, and brand meaning. *Journal of Consumer Research*, 32(December), 378-389.

- Etzioni, A. (1999). Voluntary simplicity: Characterization, select psychological implications, and societal consequences. In *Essays in Socio-Economics*, (pp. 1-26). Berlin: Springer.
- Evans, D. (2011). Thrifty, green or frugal: Reflections on sustainable consumption in a changing economic climate. *Geoforum*, 42(5), 550-557.
- Evers U., Gruner R. L., Sneddon J., & Lee J. A. (2018). Exploring materialism and frugality in determining product end-use consumption behaviors. *Psychology & Marketing*, 35, 948–956.
- Evian (2021). Packaging and recycling. https://www.evian.com/en_us/sustainable-bottled-water/water-bottle-recycling-and-packaging/
- Fedorikhin, A., Park, C. W., & Thomson, M. (2008). Beyond fit and attitude: The effect of emotional attachment on consumer responses to brand extensions. *Journal of Consumer Psychology*, 18(4), 281-291.
- Fisher, W. E. (1976). *A new climate for stewardship*. Abingdon Press.
- Fletcher, K. (2008). *Sustainable fashion and textiles: Design journeys*, Oxford: Earthscan.
- Fook, L. A., & McNeill, L. (2020). Click to buy: The impact of retail credit on over-consumption in the online environment. *Sustainability*, 12(18), 1-15.
- Frick, V., Matthies, E., Thøgersen, J., & Santarius, T. (2020). Do online environments promote sufficiency or overconsumption? Online advertisement and social media effects on clothing, digital devices, and air travel consumption. *Journal of Consumer Behaviour*, 20, 288–308.
- Frost, R. (2020), Overconsumption is driving the climate crisis. *EuroNews*, <https://www.euronews.com/living/2020/07/13/overconsumption-is-driving-the-climate-crisis-warn-scientists>
- Fuchs, C., Prandelli, E., Schreier, M., & Dahl, D. W. (2013). All that is users might not be gold: How labeling products as user designed backfires in the context of luxury fashion brands. *Journal of Marketing*, 77(September), 75-91.
- Fujii, S. (2006). Environmental concern, attitude toward frugality, and ease of behavior as determinants of pro-environmental behavior intentions. *Journal of Environmental Psychology*, 26(4), 262-268.
- García-de-Frutos, N., Ortega-Egea, J. M., & Martínez-del-Río, J. (2018), Anti-consumption for environmental sustainability: Conceptualization, review, and multilevel research directions. *Journal of Business Ethics*, 148(2), 411-435.
- Gatersleben, B., Murtagh, N., Cherry, M., & Watkins, M. (2019). Moral, wasteful, frugal, or thrifty? Identifying consumer identities to understand and manage pro-environmental behavior. *Environment and Behavior*, 51(1), 24-49.
- , ———, & Abrahamse, W. (2014). Values, identity and pro-environmental behavior. *Contemporary Social Science*, 9(4), 374-392.
- Goldsmith, R. E., & Flynn, L. R. (2015). The etiology of frugal spending: A partial replication and extension. *Comprehensive Psychology*, 4, 09–20.
- , ———, & Clark, R. A. (2014). The etiology of the frugal consumer. *Journal of Retailing and Consumer Services*, 21(2), 175-184.
- Gould, S. J., Houston, F. S., & Mundt, J. (1997). Failing to try to consume: A reversal of the usual consumer research perspective. In M. Brucks & D. J. MacInnis (Eds.), *Advances in consumer research* (Vol. 24, pp. 211-216). Provo, UT: Association for Consumer Research.
- Graafland, J. (2017). Religiosity, attitude, and the demand for socially responsible products. *Journal of Business Ethics*, 144(1), 121–138.
- Gregson, N., & Crewe L. (1997). Possession and performance: Rethinking the act of purchase in the space of the car boot sale. *Journal of Material Culture*, 2, 241–63.
- Gronow, J., & Warde, A. (Eds.). (2001). *Ordinary Consumption* (Vol. 2). Psychology Press.

- Guiot, D. & Roux, D. (2010). A second-hand shoppers' motivation scale: Antecedents, consequences, and implications for retailers. *Journal of Retailing*, 86 (December), 355-71.
- Gurhan-Canli, Z., & Maheswaran, D. (1998). The effects of extensions on brand name dilution and enhancement. *Journal of Marketing Research*, 35(November), 464-473.
- Han, Y. J., Nunes, J. C., & Drèze, X. (2010). Signaling status with luxury goods: The role of brand prominence. *Journal of Marketing*, 74, 15-30.
- Harker, L. (2020, September 17). 10 Global companies and their brand sustainability. *Lantana*, <https://www.latana.com/post/top-global-brands-environment>.
- Harnish, R. J., & Roster, C. A. (2019). The tripartite model of aberrant purchasing: A theory to explain the maladaptive pursuit of consumption. *Psychology & Marketing*, 36(5), 417-430.
- Hayes, A. F. (2012). PROCESS: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling. white paper, (accessed on December 20, 2019), [available at: <http://www.afhayes.com/public/process2012.pdf>].
- He, Y., Chen, Q., Tam, L., & Lee, R. P. (2016). Managing sub-branding affect transfer: the role of consideration set size and brand loyalty. *Marketing Letters*, 27(March), 103-113.
- Heilbroner, R. L., & Milberg, W. (2012). *The making of economic society*. Pearson Education Company.
- (1962). *The making of economic society*. Prentice-Hall.
- Hennigs, N., Wiedmann, K. P., Behrens, S., Klarmann, C., & Carduck, J. (2013). Brand extensions: A successful strategy in luxury fashion branding? Assessing consumers' implicit associations. *Journal of Fashion Marketing and Management: An International Journal*.
- Higgins, E. T., Roney, C. J., Crowe, E., & Hymes, C. (1994). Ideal versus ought predilections for approach and avoidance distinct self-regulatory systems. *Journal of Personality and Social Psychology*, 66(February), 276.
- Holt, D. B. (1998). Does cultural capital structure American consumption?. *Journal of Consumer Research*, 25(January), 1-25.
- Hsu, L., Fournier, S., & Srinivasan, S. (2016). Brand architecture strategy and firm value: how leveraging, separating, and distancing the corporate brand affects risk and returns. *Journal of the Academy of Marketing Science*, 44(2), 261-280.
- Iglesias, O., Singh, J. J., Casabayó, M., Hung, K. P., Chen, A. H., Peng, N., ... & Chou, C. L. (2011). Antecedents of luxury brand purchase intention. *Journal of Product & Brand Management*.
- Inglehart, R. (1990). *Culture shift in advanced industrial society*. Princeton, NJ: Princeton University Press.
- Isla, V. L. (2013). Investigating second-hand fashion trade and consumption in the Philippines: Expanding existing discourses. *Journal of Consumer Culture*, 13 (November), 221-40.
- Jagannathan, S., Bawa, A., & Rai, R. (2020). Narrative worlds of frugal consumers: Unmasking romanticized spirituality to reveal responsabilization and de-politicization. *Journal of Business Ethics*, 161(1), 149-168.
- Japutra, A., Ekinci, Y., & Simkin, L. (2019). Self-congruence, brand attachment and compulsive buying. *Journal of Business Research*, 99, 456-463.
- Jiang, Y., Miao, M., Jalees, T., & Zaman, S. I. (2019). Analysis of the moral mechanism to purchase counterfeit luxury goods: evidence from China. *Asia Pacific Journal of Marketing and Logistics*.

- Kalra, A., & Goodstein, R. C. (1998). The impact of advertising positioning strategies on consumer price sensitivity. *Journal of Marketing Research*, 35(May), 210-224.
- Kapferer, J. N., & Bastien, V. (2012). *The luxury strategy: Break the rules of marketing to build luxury brands*. Kogan Page Publishers.
- , & Michaut-Denizeau M. (2014). Is luxury compatible with sustainability? Luxury consumers' viewpoint. *Journal of Brand Management*, 21(January), 1–22.
- , & Valette-Florence P. (2016). Beyond rarity: the paths of luxury desire. How luxury brands grow yet remain desirable. *Journal of Product & Brand Management*, 25(April).
- Karimova, G. S., Hoffmann, N. C., Heidbrink, L., & Hoffmann, S. (2020). Virtue ethics between east and west in consumer research: Review, synthesis and directions for future research. *Journal of Business Ethics*, 165(2), 255-275.
- Kasser, T. (2005). Frugality, generosity, and materialism in children and adolescents. In K. A. Moore & L. H. Lippman (Eds.), *What do children need to flourish?* (pp. 357-373). Boston, MA: Springer.
- Katz, D. (1960). The functional approach to the study of attitudes. *Public Opinion Quarterly*, 24(January), 163–204.
- Kaufmann, H. R., Petrovici, D. A., Gonçalves Filho, C., & Ayres, A. (2016). Identifying moderators of brand attachment for driving customer purchase intention of original vs counterfeits of luxury brands. *Journal of Business Research*, 69(December), 5735-5747.
- Keinan, A., Crener, S., & Goor, D. (2020). Luxury and environmental responsibility. In *Research Handbook on Luxury Branding*. Edward Elgar Publishing.
- , ———, & Bellezza, S. (2016). Luxury brand research new perspectives and future priorities. In *Online Luxury Retailing: Leveraging Digital Opportunities: Research, Industry Practice, and Open Questions*. Philadelphia: Wharton School, Baker Retailing Center.
- Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *Journal of Marketing*, 57(January), 1-22.
- & Aaker, D. A. (1992). The effects of sequential introduction of brand extensions. *Journal of Marketing Research*, 29(1), 35-50.
- (2009). Managing the growth trade - off: Challenges and opportunities in luxury branding. *Journal of Brand Management*, 16(March), 290-301.
- , & Sood, D. (2003). Brand equity dilution. *MIT Sloan Management Review*, 45(June), 12–15.
- , & Lehmann, D. R. (2006). Brands and branding: Research findings and future priorities. *Marketing Science*, 25(November), 740-759.
- 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.
- Kim, C. K., & Lavack, A. M., Smith, M. (2001). Consumer evaluation of vertical brand extensions and core brands. *Journal of Business Research*, 52(June) 211–222.
- Kirmani, A., & Zeithaml, V. (1993). Advertising, perceived quality, and brand image. *Brand equity and advertising: Advertising's role in building strong brands*, 143-161.
- , & Rao, A. (2000). No pain, no gain: A critical review of the literature on signaling unobservable product quality. *Journal of Marketing*, 64(April), 66-79.
- Kozinets, R. V., Handelman, J. M., & Lee, M. S. (2010). Don't read this; or, who cares what the hell anti-consumption is, anyways? *Consumption, Markets and Culture*, 13(3), 225-233.

- Kropfeld M. I., Nepomuceno M. V., & Dantas D. C. (2018). The ecological impact of anticonsumption lifestyles and environmental concern. *Journal of Public Policy & Marketing*, 37, 245–259.
- Kuksov, D., K., & Xie, K. (2012). Competition in a status goods market. *Journal of Marketing Research*, 49(October), 609–623.
- Lastovicka, J. (2006). Frugal materialists. The anti-consumption seminar, International Centre for Anti-Consumption Research, Auckland.
- , Bettencourt, L. A., Hughner, R. S., & Kuntze, R. J. (1999). Lifestyle of the tight and frugal: Theory and measurement. *Journal of Consumer Research*, 26(1), 85-98.
- Lee, S. H. M. (2016). When are frugal consumers not frugal? The influence of personal networks. *Journal of Retailing and Consumer Services*, 30, 1-7.
- Lee, C. H., & Rhee, B. D. (2021). Retailer-run resale market and supply chain coordination. *International Journal of Production Economics*, 235.
- , Chen, W., & Wang, C. H. (2014). The role of visual art in enhancing perceived prestige of luxury brands. *Marketing Letters*, 26(January), 593-606.
- Leonard-Barton, D. (1981). Voluntary simplicity lifestyles and energy conservation. *Journal of Consumer Research*, 8(3), 243-252.
- Lichtenstein, D., Netemeyer, R., & Burton, S. (1990). Distinguishing coupon proneness from value consciousness: An acquisition-transaction utility theory perspective. *Journal of Marketing*, 54(3), 54-67.
- Lin, Y. C., & Chang, C. C. A. (2012). Double standard: The role of environmental consciousness in green product usage. *Journal of Marketing*, 76(5), 125-134.
- Livingston, A. (2015). Meet “The Compact,” a frugal group dedicated to buying secondhand only. *Money Crashers*, <https://www.moneycrashers.com/compact-frugal-group-buy-secondhand/>.
- Loken, B., & Roedder, D. J. (1993). Diluting brand beliefs: When do brand extensions have a negative impact?. *Journal of Marketing*, 57(July), 71–84.
- Lynch Jr., J., Netemeyer, R., Spiller, S., & Zammit, A. (2010). A generalizable scale of propensity to plan: The long and the short of planning for time and for money. *Journal of Consumer Research*, 37(1), 108-128.
- Mack, N., Woodson, C., MacQueen K. M., Guest, G., Namey, E. (2005). In depth interviews. Qualitative research methods a data collector’s field guide. *North Carolina: Family Health International*, 34-49.
- MacKenzie, S. B., Podsakoff, P. M., & Podsakoff, N. P. (2011). Construct measurement and validation procedures in MIS and behavioral research: integrating new and existing techniques. *MIS Quarterly*, 35(2), 293–334.
- Malär, L., Krohmer, H., Hoyer, W. D., & Nyffenegger, B. (2011). Emotional brand attachment and brand personality: The relative importance of the actual and the ideal self. *Journal of Marketing*, 75(July), 35-52.
- Marshall, B., Cardon, P., Poddar, A., & Fontenot, R. (2013). Does sample size matter in qualitative research?: A review of qualitative interviews in IS research. *Journal of Computer Information Systems*, 54(1), 11-22.
- Marston, C., Renedo, A., & Miles, S. (2020). Community participation is crucial in a pandemic. *Lancet*, 395, 1676–78.
- Masson, J. M. (1976). The psychology of the ascetic. *The Journal of Asian Studies*, 35(4), 611-625.
- Merz, E. L., Malcarne, V. L., Roesch, S. C., Ko, C. M., Emerson, M., Roma, V. G., & Sadler, G. R. (2013). Psychometric properties of Positive and Negative Affect Schedule (PANAS) original and short forms in an African American community sample. *Journal of affective disorders*, 151(3), 942-949.

- Mikkelsen, B. (2005): *Methods for development work and research*. 2nd Ed. New Delhi: SAGE.
- Mill, J. S. (1848). 1999. Principles of political economy with some of their applications to social philosophy.
- Miller, D. (2001). The poverty of morality. *Journal of Consumer Culture*, 1(2), 225-243.
- . (1998). *The theory of shopping*. Cambridge; Polity Press.
- Minelgaitė, A., & Liobikienė, G. (2019). Waste problem in European Union and its influence on waste management behaviours. *Science of The Total Environment*, 667, 86-93.
- Monga, A. B., & Roedder, J. D. (2010). What makes brands elastic? The influence of brand concept and styles of thinking on brand extension evaluation. *Journal of Marketing*, 74(May), 80-92.
- Morgado, F. F., Meireles, J. F., Neves, C. M., Amaral, A., & Ferreira, M. E. (2017). Scale development: ten main limitations and recommendations to improve future research practices. *Psicologia: Reflexão e Crítica*, 30.
- Morgan, E. S. (1967). The puritan ethic and the American revolution. *The William and Mary Quarterly: A Magazine of Early American History*, 24(1), 4-43.
- Muniz, A., & O'guinn, T. C. (2001). Brand community. *Journal of Consumer Research*, 27(February), 412-432.
- Nash, J. A. (2007). Frugality: Antidote to prodigality. *Journal of Lutheran Ethics*.
- Netemeyer, R. G., Krishnan, B., Pullig, C., Wang, G., Yagci, M., Dean, D., Ricks, J., & Wirth, F. (2004). Developing and validating measures of facets of customer-based brand equity. *Journal of Business Research*, 57(February), 209–224.
- NDP (2020). A new look at luxury consumers. Exclusive Report Series.
- Nepomuceno, M. V., & Laroche, M. (2015). The impact of materialism and anti-consumption lifestyles on personal debt and account balances. *Journal of Business Research*, 68(3), 654–664.
- , & ———. (2017). When materialists intend to resist consumption: The moderating role of self-control and long-term orientation. *Journal of Business Ethics*, 143(3), 467-483.
- Nguyen, B. M., Wu, S. C., & Chen, S. (2017). How does self-concept and brand personality affect luxury consumers' purchasing decisions?. In *Luxury Fashion Retail Management* (pp. 19-48), Springer, Singapore.
- Nia, A., & Zaichkowsky, J. L. (2000). Do counterfeits devalue the ownership of luxury brands?. *Journal of Product and Brand Management*, 9(December), 485-497.
- Nicol, P. (2009). *Sucking eggs: What your wartime granny could teach you about diet*. London: Chatto & Windus.
- OECD (2018). *Perspectives on global development 2019*. Paris: OECD.
- Onorato, R. S., & Turner, J. C. (2004). Fluidity in the self-concept: The shift from personal to social identity. *European Journal of Social Psychology*, 34(3), 257– 278.
- Pan, L., Pezzuti, T., Lu, W., & Pechmann, C. (2019). Hyperopia and frugality: Different motivational drivers and yet similar effects on consumer spending. *Journal of Business Research*, 95, 347-356.
- Pandey, R. U., Surjan, A., & Kapshe, M. (2018). Exploring linkages between sustainable consumption and prevailing green practices in reuse and recycling of household waste: Case of Bhopal city in India. *Journal of Cleaner Production*, 173, 49-59.
- Park, C. W., MacInnis, D. J., Priester, J., Eisingerich, A. B., & Iacobucci, D. (2010). Brand attachment and brand attitude strength: Conceptual and empirical differentiation of two critical brand equity drivers. *Journal of Marketing*, 74(November), 1–17.
- , ———, ——— (2008). *Brand attachment: Construct, consequences, and causes*. Now Publishers Inc.

- , Milberg, S., & Lawson, R. (1991). Evaluation of brand extensions: The role of product feature similarity and brand concept consistency. *Journal of Consumer Research*, 18(June), 185-93.
- Pepper, M., Jackson, T., & Uzzell, D. (2009). An examination of the values that motivate socially conscious and frugal consumer behaviours. *International Journal of Consumer Studies*, 33(2), 126-136.
- PepsiCo (2020). 2019 sustainability report. <https://www.pepsico.com/sustainability/focus-areas/packaging>.
- Pettit, K. L., Sawa, S. L., & Sawa, G. H. (1985). Frugality: A cross-national moderator of the price-quality relationship. *Psychology & Marketing*, 2(4), 253-265.
- Panda, T. K., Kumar, A., Jakhar, S., Luthra, S., Garza-Reyes, J. A., Kazancoglu, I., & Nayak, S. S. (2020). Social and environmental sustainability model on consumers' altruism, green purchase intention, green brand loyalty and evangelism. *Journal of Cleaner production*, 243, 118575.
- Phau, I., & Teah, M. (2009). Devil wears (counterfeit) Prada: A study of antecedents and outcomes of attitudes toward counterfeits of luxury brands. *Journal of Consumer Marketing*, 26(January), 15-27.
- , Teah, M., Doss, F., & Robinson, T. (2013). Luxury perceptions: Luxury brand vs counterfeit for young US female consumers. *Journal of Fashion Marketing and Management: An International Journal*, 17(4), 424-439.
- Philp, M., & Nepomuceno, M. V. (2019). When the frugal become wasteful: An examination into how impression management can initiate the end-stages of consumption for frugal consumers. *Psychology & Marketing*, 37(2), 326-339.
- Pinto, D. C., Nique, W. M., Anana, E. D. S., & Herter, M. M. (2011). Green consumer values: How do personal values influence environmentally responsible water consumption? *International Journal of Consumer Studies*, 35(2), 122-131.
- Pitta, D. A., & Katsanis, L. A. (1995). Understanding brand equity for successful brand extension. *Journal of Consumer Marketing*, 12(October), 51-64.
- Podkalicka, A., & Potts, J. (2014). Towards a general theory of thrift. *International Journal of Cultural Studies*, 17(3), 227-241.
- Porat, T., Nyrup, R., Calvo, R. A., Paudyal, P., & Ford, E. (2020). Public health and risk communication during COVID-19—enhancing psychological needs to promote sustainable behavior change. *Frontiers in Public Health*, 8, 637.
- Price, L. L., Feick, F., & Guskey, F. A. (1988). Couponing behaviors of the market maven: Profile of a super couponer. In M. J. Houston (Ed.), *Advances in consumer research* (Vol. 15, pp. 354-359). Provo, UT: Association for Consumer Research.
- Quelch, J. A., & Jocz, K. E. (2009). How to market in a downturn. *Harvard Business Review*, 87(4), 52-62.
- (1987). Marketing the premium product. *Business Horizons*, 30(May), 38-45.
- Rao, B. C. (2013). How disruptive is frugal? *Technology in Society*, 35(1), 65-73.
- Rayburn, S. W., McGeorge, A., Anderson, S., & Sierra, J. J. (2021). Crisis-induced behavior: From fear and frugality to the familiar. *International Journal of Consumer Studies*, doi: 10.1111/ijcs.12698.
- Richins, M. L. (1994). Special possessions and the expression of material values. *Journal of Consumer Research*, 21(3), 522-533.
- Rick, S. I., Cryder, C. E., & Loewenstein, G. (2008). Tightwads and spendthrifts. *Journal of Consumer Research*, 34(6), 767-782.
- Rosane, O. (2021). Starbucks pilots reusable cups in Seattle, but does the new program go far enough? EcoWatch, <https://www.ecowatch.com/starbucks-reusable-cups-2652716911.html>.

- Rose, P., Smith, S. T., & Segrist, D. J. (2010). Too cheap to chug: Frugality as a buffer against college-student drinking. *Journal of Consumer Behaviour*, 9(3), 228-238.
- Rousseau, G. G., & Venter, D. J. L. (1999). The influence of nostalgia on consumer preference. *SA Journal of Industrial Psychology*, 25(1), 36-42.
- Roux, D. (2006). Am I what I wear? An exploratory study of symbolic meanings associated with secondhand clothing. In *Advances in Consumer Research*, Connie Pechmann and Linda Price, Duluth, MN: Association for Consumer Research, 33, 29–35.
- , & Korchia, M. (2006). Am I what I wear? An exploratory study of symbolic meanings associated with secondhand clothing. *Advances in Consumer Culture*, 33, 29–35.
- Rulikova, M. (2019). “I would never wear those old clodhoppers!” Age differences and used clothing consumption in the Czech Republic, *Journal of Consumer Culture*, 20(2), 176-193.
- Rustam, A., Wang, Y., & Zameer, H. (2020). Environmental awareness, firm sustainability exposure and green consumption behaviors. *Journal of Cleaner Production*, 268, 122016.
- Sarial-Abi, G., Vohs, K. D., Hamilton, R., & Ulqinaku, A. (2017). Stitching time: vintage consumption connects the past, present, and future. *Journal of Consumer Psychology*, 27(April), 182–194.
- Schindler, R. M. (1989). The excitement of getting a bargain: Some hypotheses concerning the origins and effects of smart-shopper feelings. In T. K. Srull (Ed.), *Advances in consumer research* (Vol. 16, pp. 447-453). Provo, UT: Association for Consumer Research.
- Sen, S., Johnson, A., Bhattacharya, C. B., & Wang, J. (2015). Identification and attachment in consumer–brand relationships. In *Review of Marketing Research*, London: Emerald Group Publishing Limited, 12, 151–174.
- Sethuremen, R., & Cole, C. (1997). Why do consumers pay more for national brands than for store brands?. *Marketing Science Institute*.
- Shavitt, S. (1990). The role of attitude objects in attitude functions. *Journal of Experimental Social Psychology*, 26(March), 124–148.
- Sherry Jr, J. F. (1990). A sociocultural analysis of a Midwestern American flea market. *Journal of consumer research*, 17(1), 13-30.
- (1990). Dealers and dealing in a deriodic market: Informal retailing in ethnographic perspective, *Journal of Retailing*, 66(2), 174-200.
- Sheth, J. N., Sethia, N. K., & Srinivas, S. (2011). Mindful consumption: A customer-centric approach to sustainability. *Journal of the Academy of Marketing Science*, 39(1), 21–39.
- Shoham, A., & Brencic, M. M. (2004). Value, price consciousness, and consumption frugality: An empirical study. *Journal of International Consumer Marketing*, 17(1), 55-69.
- , Gavish, Y., & Akron, S. (2017). Hoarding and frugality tendencies and their impact on consumer behaviors. *Journal of International Consumer Marketing*, 29(4), 208-222.
- Silverstein, M. J., & Fiske, N. (2003). Luxury for the masses. *Harvard Business Review*, 81(April), 48–57.
- Sinha, I., & Batra, R. (1999). The effect of consumer price consciousness on private label purchase. *International Journal of Research in Marketing*, 16(3), 237-251.
- Smith, S. M., Haugtvedt, C. P., & Petty, R. E. (1994). Attitudes and recycling: Does the measurement of affect enhance behavioral prediction? *Psychology & Marketing*, 11(4), 359-374.

- Solomon, M. R. (1983). The role of products as social stimuli: A symbolic interactionism perspective. *Journal of Consumer Research*, 10(December), 319–329.
- Sownie, Carrie (2020). 11 Eco-friendly brands that put the planet first, *99 Designs*, <https://99designs.com/blog/business/eco-friendly-brands/>.
- Stets, J. E., & Burke, P. J. (2000). Identity theory and social identity theory. *Social Psychology Quarterly*, 224-237.
- Stillerman, J. (2012). Chile's forgotten consumers: Poor urban families, consumption strategies, and the moral economy of risk in Santiago. In *Consumer Culture in Latin America* (pp. 67-79). Palgrave Macmillan US.
- Suárez, E., Hernández, B., Gil-Giménez, D., & Corral-Verdugo, V. (2020). Determinants of frugal behavior: The influences of consciousness for sustainable consumption, materialism, and the consideration of future consequences. *Frontiers in Psychology*, 11, 3279.
- Sung, Y. A. (2017). Age differences in the effects of frugality and materialism on subjective well-being in Korea. *Family and Consumer Sciences Research Journal*, 46(2), 144-159.
- Swaminathan, V., Page, K. L., & Gurhan-Canli, Z. (2007). My brand or our brand: The effects of brand relationship dimensions and self-construal on brand evaluations. *Journal of Consumer Research*, 34(August), 248-259.
- Tajfel, H. (1982). Social psychology of intergroup relations. *Annual Review of Psychology*, 33(1), 1– 39.
- Tapia-Fonllem C., Corral-Verdugo V., Fraijo-Sing B., & Durón-Ramos M. (2013). Assessing sustainable behavior and its correlates: A measure of pro-ecological, frugal, altruistic and equitable actions, *Sustainability*, 5, 711–723.
- Tatzel, M. (2002). “Money worlds” and well-being: An integration of money dispositions, materialism and price-related behavior. *Journal of Economic Psychology*, 23(1), 103–126.
- Thøgersen J. (2018). Frugal or green? Basic drivers of energy saving in European households. *Journal of Cleaner Production*, 197, 1521–1530.
- Thompson, C. J., & Haytko, D.L. (1997). Speaking of fashion: Consumers' uses of fashion discourses and the appropriation of countervailing cultural meanings. *Journal of Consumer Research*, 24(June), 15-42.
- Todd, S., & Lawson, R. (2003). Towards an understanding of frugal consumers. *Australasian Marketing Journal*, 11(3), 8-18.
- Tonglet, M., Phillips, P. S., & Bates, M. P. (2004). Determining the drivers for householder pro-environmental behaviour: waste minimisation compared to recycling. *Resources, conservation and recycling*, 42(1), 27-48.
- Touchette, L., & Nepomuceno, M. V. (2020). The environmental impact of consumption lifestyles: Ethically minded consumption vs. tightwads. *Sustainability*, 12(23), 9954.
- Trudel, R. (2019). Sustainable consumer behavior. *Consumer Psychology Review*, 2(1), 85-96.
- Truong, Y., McColl, R., & Kitchen, P. J. (2009). New luxury brand positioning and the emergence of masstige brands. *Journal of Brand Management*, 16(March), 375–382.
- Turunen, L. L. M., & Leipämaa-Leskinen H. (2015). Pre-loved luxury: Identifying the meanings of second-hand luxury possessions. *Journal of Product and Brand Management*, 24(March), 57–65.
- , Cervellon, M. C., & Carey, L. D. (2019). Selling second-hand luxury: Empowerment and enactment of social roles. *Journal of Business Research*, 24(December).

- United Nations (2015). Transforming our world: The 2030 agenda for sustainable development. <https://sdgs.un.org/publications/transforming-our-world-2030-agenda-sustainable-development-17981>.
- United Nations (2016). The sustainable development goals report 2016. <https://unstats.un.org/sdgs/report/2016/>
- United Nations Center for Regional Development (2012). 3R Initiative. <https://www.uncrd.or.jp/index.php?menu=388>
- United Nations Environment Programme (2017). Promoting, remanufacturing, refurbishment, repair, and direct reuse. https://ec.europa.eu/environment/international_issues/pdf/7_8_february_2017/works_hop_report_Brussels_7_8_02_2017.pdf.
- Vickers, J. S., & Renand F. (2003). The marketing of luxury goods: An exploratory study - three conceptual dimensions. *The Marketing Review*, 3(December), 459–478.
- Voyer, B. G., & Beckham, D. (2014). Can sustainability be luxurious? A mixed-method investigation of implicit and explicit attitudes toward sustainable luxury consumption. In J. Cotte, & S. Wood (Eds), *Advances in Consumer Research* (pp. 245-250), Duluth MN: Association for Consumer Research, 42.
- Wang, H., Ma, B., Bai, R., & Zhang, L. (2021). The unexpected effect of frugality on green purchase intention. *Journal of Retailing and Consumer Services*, 59, 102385.
- Wang, Y., Stoner, J. L., & John, D. R. (2019). Counterfeit luxury consumption in a social context: The effects on females' moral disengagement and behavior. *Journal of Consumer Psychology*, 29(2), 207-225.
- Watson, D., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: the PANAS scales. *Journal of Personality and Social Psychology*, 54(June), 1063-1070.
- White, K., & Dahl, D. (2006). To be or not be? The influence of dissociative reference groups on consumer preferences. *Journal of Consumer Psychology*, 16(December), 404-414.
- Whittler, T., & Spira, J. (2002). Model's race: A peripheral cue in advertising messages?. *Journal of Consumer Psychology*, 12(October), 291-301.
- Wilcox, K., Kim, H. M., & Sen, S. (2009). Why do consumers buy counterfeit luxury brands?. *Journal of Marketing Research*, 46(April), 247–259.
- Wilk, R. (2001). Consuming morality. *Journal of Consumer Culture*, 1(2), 245-260.
- , & Cliggett, L. C. (2009). *Economies and cultures: Foundations of economic anthropology*. Boulder, CO: Westview Press.
- Wilson, D. R., Loxton, N. J., Joynt, T., & O'Donovan, A. (2021). There is no such thing as a mindful binge: How mindfulness disrupts the pathway between anxiety and impulsivity on maladaptive eating behaviours. *Personality and Individual Differences*, 168, 110393.
- Wilson, M., & Robson, R. (2019). *Overexposure of a luxury brand: Coach Inc.'s distribution and image problem*, Thousand Oaks, CA: SAGE Publications.
- Winston, A. (2016). Luxury brands can no longer ignore sustainability. *Harvard Business Review*, 8(February), 1–5.
- Witkowski, T. H. (2010). A brief history of frugality discourses in the United States. *Consumption, Markets and Culture*, 13(3), 235-258.
- (2003). World War II poster campaigns - preaching frugality to American consumers. *Journal of Advertising*, 32(1), 69-82.
- (1989). Colonial consumers in revolt: Buyer values and behavior during the nonimportation movement, 1764–1776. *Journal of Consumer Research*, 16(2), 216-226.

- Wolfgramm, R., & Conroy, D. (2011). Status and sustainable consumption in lifestyles: From conspicuous to conscious. *International Journal of Environmental Cultural Economic and Social Sustainability*, 7(January), 301–311.
- Yang, Q. Z., Zhou, J., & Xu, K. (2014). A 3R implementation framework to enable circular consumption in community. *International Journal of Environmental Science and Development*, 5(2), 217.
- YEC (2018), Why sustainable branding matters, *Forbes*, <https://www.forbes.com/sites/theyec/2018/08/20/why-sustainable-branding-matters/?sh=15f6e00b5b6e>
- Zampetakis, L. A. (2014). The emotional dimension of the consumption of luxury counterfeit goods: an empirical taxonomy. *Marketing Intelligence & Planning*.
- Zavestoski, S. (2002). The social–psychological bases of anticonsumption. *Psychology & Marketing*, 19(2), 149-165.
- Zhou, L., & Hui, M. K. (2003). Symbolic value of foreign products in the people’s republic of China. *Journal of International Marketing*, 11(June), 36-58.
- Zhou, N., & Belk, R. W. (2004). Chinese consumer readings of global and local advertising appeals. *Journal of Advertising*, 22(October), 63-76.
- Zink, T., & Geyer, R. (2017). Circular economy rebound. *Journal of Industrial Ecology*, 21(3), 593-602.

APPENDIX

PILOT STUDY 2 STIMULI

PICTURE 1

REGULAR LINE MANIPULATION



PICTURE 2

PREOWNED MARKET MANIPULATION



STUDY 1 STIMULI

PICTURE 3

RECENT SEASON MANIPULATION

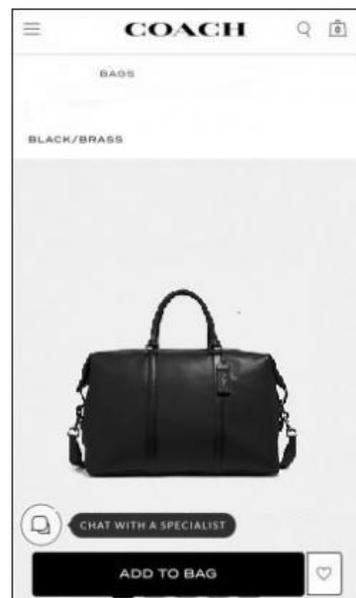
**Preowned Coach bags from
2018 spring collection are now available!**



PICTURE 4

OLDER SEASON MANIPULATION

**Preowned Coach bags from
2010 spring collection are now available!**



STUDY 2 STIMULI

PICTURE 5

SUSTAINABILITY APPEAL MANIPULATION

Preowned products for sustainability!

Preowned Coach bags are now available!



PICTURE 6

AFFORDABILITY APPEAL MANIPULATION

Preowned products for low prices!

Preowned Coach bags are now available!

