

Consumers' choices between products with different uniqueness duration

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Abstract

Purpose – This study aims to introduce the duration of uniqueness, an important dimension of unique products. It studies how choices between products with long versus short duration of uniqueness are influenced by the interaction between pressure and consumers' need for uniqueness (NFU).

Design/methodology/approach – This research uses a multi-method study approach. A pilot field-study tested the novelty and importance of the research by asking retail professionals to predict the choice of a hypothetical consumer. A retrospective study assessed the importance of duration of uniqueness in unique product choices, by asking consumers about a real and recent unique product purchase. Four additional experimental studies directly tested hypotheses by manipulating pressure and by measuring or manipulating uniqueness motivations.

Findings – The pilot field-study showed the novelty and relevance of this research for professionals. Study 1 revealed that, retrospectively, uniqueness duration was considered important for the choice of unique products, by high-NFU consumers under pressure. Studies 2 and 3 demonstrated that pressure increases the tendency of high-NFU, but not low-NFU, consumers to choose products with long over short uniqueness duration. Study 4 provided initial evidence for the process behind the effect. Study 5 showed that considerations of uniqueness duration when choosing mediated the effects.

Research limitations/implications – The results of the pilot field-study and retrospective study might be affected by recall bias or lay theories. The findings need to be replicated with other sources of pressure and uniqueness. This calls for further research.

Practical implications – Results are important for companies marketing unique products and they suggest that pressure-based marketing appeals can be used strategically to increase sales of products with long uniqueness duration but decrease sales of products with short uniqueness duration. Although the research provides these guidelines, managers should consider the ethical implications of pressure strategies.

Originality/value – This is the first attempt to empirically investigate the duration of uniqueness. Although extant research has examined choices between products with different degrees of uniqueness, this research studies choice of products with similar degrees of uniqueness, but different uniqueness duration. Thus, this research adds to the scarce literature studying the duration of symbolic benefits. Moreover, although pressure and NFU frequently co-exist in uniqueness consumption settings, this study is the first to study their joint effects.

Keywords Pressure, Need for uniqueness, Duration of uniqueness, Symbolic benefits, Unique product choices

Paper type Research paper



Introduction

Uniqueness is an important benefit that consumers seek in products (Lynn and Harris, 1997a), resulting in annual transactions worth €262bn (D'Arpizio *et al.*, 2017). Consumers with high levels of need for uniqueness (hereafter NFU) prefer products that offer more uniqueness (Snyder and Fromkin, 1980; Tian *et al.*, 2001). Yet, some products offer uniqueness for a long time, whereas others offer uniqueness only for a limited time, with their uniqueness benefits diminishing thereafter (Pesendorfer, 1995; Sproles, 1981). Hence, consumers seeking uniqueness frequently decide between products with a similar degree, but the different duration of uniqueness. How do these consumers make these choices? This is the focus of this research.

Choices between products that offer uniqueness for longer vs shorter durations are important for companies selling unique products[1]. These companies often use pressure-based appeals [e.g. “only a few available” or “24-h only”; Cialdini (2007), Lynn (1991), Robinson *et al.* (2016), Snyder (1992)] to make consumers feel an urgency to buy (Dhar and Nowlis, 1999). Thus, consumers choose unique products frequently under pressure (Lynn and Harris, 1997a). Consider a consumer with high-NFU choosing between two exclusive and “limited edition” bags. Both bags will help the consumer project uniqueness to the same degree. However, one bag will offer uniqueness for many years (e.g. an iconic Louis Vuitton bag), whereas the other will offer uniqueness for a limited period (e.g. a seasonal Louis Vuitton bag). As both bags are exclusive and limited in availability, the consumer is under pressure to decide. Would this pressure affect the choice of this consumer? More generally, how do pressure and NFU interact to affect choices between products that differ in the duration of uniqueness that they offer?

This research builds on previous work on pressure (Dhar *et al.*, 2000; Ku *et al.*, 2013; Maule *et al.*, 2000; Yao and Oppewal, 2016) and NFU (Snyder and Fromkin, 1980; Tian *et al.*, 2001) to examine this question. We propose and find that higher pressure, compared to lower pressure, increases the tendency of high-NFU consumers to choose products that offer uniqueness for longer over a shorter duration. This happens because higher pressure increases the extent to which consumers high in NFU focus on the duration of uniqueness.

This investigation makes important contributions. First, literature on NFU has examined preferences for products that offer different degrees of uniqueness benefits (Brock, 1968; Lynn, 1991; Snyder and Fromkin, 1980). This research is the first empirical attempt to study the duration of uniqueness, another dimension of the benefit of uniqueness. Second, we also add to the literature studying the importance of the duration of product benefits. Work on this subject mostly focuses on the duration of functional benefits (Yan *et al.*, 2014; Pena-Marín and Bhargava, 2016; Mittelman *et al.*, 2020). By studying the duration of uniqueness, this research contributes to the scarce literature about the duration of symbolic benefits (Berger and Le Mens, 2009). Third, despite their frequent co-occurrence in the marketplace, pressure (Zur and Breznitz, 1981; Dhar and Nowlis, 1999; Ku *et al.*, 2013) and NFU (Chan *et al.*, 2012) have been investigated mostly independently from each other. Thus, this research brings together these two streams and shows how pressure and NFU interact, affecting the choices of consumers.

Our findings also have important implications for industries in which pressure-based appeals are frequently used, such as automotive, technology, luxury and others (Lynn and Harris, 1997b; Shi *et al.*, 2020). Our research suggests that these appeals can be used strategically to increase sales of products with long uniqueness duration but decrease sales of products with short uniqueness duration. A pilot field study reported later indicated that these implications are not only relevant but also novel for professionals.

Next, we present the relevant literature leading to our hypotheses.

Pressure and its effects

Pressure is a subjective psychological state in which individuals feel a *sense of increased urgency* (Dhar and Nowlis, 1999), as a result of limitations in time (Andrews and Farris, 1972; Ariely and Wertenbroch, 2002; Baer and Oldham, 2006; Latham and Locke, 1975) or in product quantity (Kristofferson *et al.*, 2016; Roux *et al.*, 2015) when making a choice.

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Extensive research suggests that pressure has important effects on how consumers process information (Dhar *et al.*, 2000; Maule *et al.*, 2000; Suri *et al.*, 2013) and make decisions (Zur and Breznitz, 1981; Dhar and Nowlis, 1999), as shown in Table 1. Some research suggests that consumers under pressure tend to simplify decisions by focusing on specific information and to put less effort on the decision task (Svenson *et al.*, 1990; Iyer, 1989; Lin *et al.*, 2008). For example, motivated consumers under higher pressure narrow down processing (Suri *et al.*, 2007; Yao and Oppewal, 2016) by filtering information (Maule *et al.*, 2000) and by using salient differences between options as a decision rule (Dhar and Nowlis, 1999). This narrower processing is focused on the evaluation of specific information (Payne *et al.*, 1991), which is relevant for the decision (Bronner, 1982; Maule and Svenson, 1993). On the other hand, consumers under lower pressure use more extensive information (Iyer, 1989) and evaluate more aspects of the decision task (Zur and Breznitz, 1981; Wright, 1974).

Study	Type of pressure	Dependent variable	Key findings on information processing
Wright (1974)	Time pressure distraction	Positive vs negative dimensions	Under pressure, individuals focus on less dimensions than under low pressure
Worchel <i>et al.</i> (1975)	Supply scarcity	Value	Under pressure, individuals put more attention into the decision than under low pressure
Zur and Breznitz (1981)	Time pressure	Risky choices	Under pressure, individuals focus more on relevant dimensions than under low pressure
Payne <i>et al.</i> (1988)	Time pressure	Processing of information	Under pressure, individuals initially evaluate a limited number of attributes of all alternates
Svenson <i>et al.</i> (1990)	Time pressure	Choices of partially described alternates	Under pressure, individuals focus on positive attributes Under low pressure, individuals focus on common attributes
Bozzolo and Brock (1992)	Message unavailability	Amount of content processed	Under pressure, individuals are more motivated to scrutinize the message than under low pressure
Cialdini (1993)	Scarcity appeals	Compliance	Under pressure, individuals do a less thoughtful analyses of the situation than under low pressure
Dhar and Nowlis (1999)	Time pressure	Choice deferral	Under pressure individuals focus more on unique differences between options than under low pressure
Maule <i>et al.</i> (2000)	Time pressure	Choice of risky or safe option	Under pressure, individuals filter and accelerate information processing
Suri <i>et al.</i> (2007)	Product temporal scarcity	Motivation to process information	Under pressure, motivated individuals process less information than unmotivated individuals

Table 1. Empirical contributions on effects of pressure and information processing, revealing that pressure makes individuals focus on specific information

As described above, companies marketing unique products often use pressure-based appeals to communicate their messages to high-NFU consumers (Lynn and Harris, 1997b; Shi *et al.*, 2020). Next, we discuss NFU and its effects.

Need for uniqueness and its effects

NFU is the chronic (Snyder, 1992; Snyder and Fromkin, 1980; Tian *et al.*, 2001; Tian and McKenzie, 2001) or contextually activated (Maimaran and Wheeler, 2008; Snyder and Fromkin, 1980) need to be positively different from others (Roy and Rabbane, 2015; Snyder and Fromkin, 1977). Individuals convey their uniqueness in multiple ways, such as group memberships (Snyder and Fromkin, 1977), experiences (Fromkin, 1970) and shopping venues (Darley and Lim, 1993). Choosing unique products is also a way to project uniqueness (Snyder, 1992; Snyder and Fromkin, 1980; Tian *et al.*, 2001). These can be fashion products (Braudel, 1981) but also housing, automobiles, technology (Belk, 1988) or even day-to-day products such as umbrellas or posters (Tian *et al.*, 2001), as long as owning and displaying these products helps to define one's self (Solomon, 1983; Belk, 1988).

Thus, the choice of unique products is important for high-NFU (but not for low-NFU) consumers, who strive to maintain their uniqueness (Snyder and Fromkin, 1980, p. 75). High-NFU consumers prefer products with higher degrees of uniqueness, such as luxurious (Kauppinen-Räsänen *et al.*, 2018), scarce (Brock, 1968; Snyder and Fromkin, 1980), innovative and customized products (Lynn and Harris, 1997a, 1997b; Snyder and Fromkin, 1980; Tian *et al.*, 2001; Tian and McKenzie, 2001; Zhou and Nakamoto, 2007) over products with lower degrees of uniqueness, as shown in Table 2.

However, consumers often choose not only between a more unique and less unique product but also between equally unique products that differ in duration of uniqueness. Indeed, Snyder and Fromkin (1980, p. 75) imply that individuals consider the duration of uniqueness because of their inclination to keep satisfying their NFU over time. Lynn and Snyder (2002, p. 399) also suggest that consumers try to gain uniqueness by "adopting new products before others do," implying thus that they want to purchase unique products fast, as the uniqueness that these products offer may dissipate if unique products become popular over time (Heckert, 1989; Ruvio, 2008). Finally, Snyder (1992, p. 20) indirectly suggests that when uniqueness dissipates, individuals who lose their sense of uniqueness "continue the search" for emerging unique products (Thompson and Haytko, 1997) that re-establish it. Thus, this literature suggests that consumers continuously seek to build and maintain uniqueness over time through their product choices, and hence they care about how long a product will provide uniqueness when choosing a unique product.

Duration of uniqueness refers to the future period of time that unique products are expected to deliver their unique benefits. This construct is different from the duration of established functional benefits such as a product's durability (Guru and Paulssen, 2020; Pena-Marin and Bhargava, 2016). Durability refers mainly to the production method and materials of the product (Brucks *et al.*, 2000) and is usually conceptualized as the useful life of a product (Brucks *et al.*, 2000; Guru and Paulssen, 2020; Molina-Castillo *et al.*, 2013). Duration of uniqueness, on the other hand, explores another aspect: how long the product will provide uniqueness, a symbolic benefit.

Products can offer uniqueness for different durations (Pesendorfer, 1995; Simmel, 1957; Sproles, 1981). For example, in the fashion industry, Simmel (1957, p. 547) suggests that the uniqueness of fashion products can be transitory and states that "the distinctiveness which in early stages of a set of fashion assures for it a certain distribution is destroyed as fashion spreads". Pesendorfer (1995, p. 772) differentiates between fashion that "requires that the design stays fashionable for a long period of time" and fashion in which the "cycle is short." Similarly, Sproles (1981, p. 116–118) analyzes fashion cycles in two-time frames: "long run

Table 2.
Empirical contributions on choices involving a unique product, revealing a gap in the study of choices between unique products

Study	Type of uniqueness	Dependent variable	Key findings on the influence of NFU
Fromkin (1970)	Contextual NFU, <i>manipulated through</i> feedback from a test	Preference for scarce vs plentiful experiences	<ul style="list-style-type: none"> • Individuals high in NFU prefer scarce over plentiful experiences
Simonson and Nowlis (2000)	<ul style="list-style-type: none"> • Chronic NFU^a (Snyder, 1977) 	Preference for unconventional vs conventional choices	<ul style="list-style-type: none"> • Individuals high in NFU who explain their decisions, tend to make less conventional choices
Tian <i>et al.</i> (2001) <i>Scale development</i>	<ul style="list-style-type: none"> • Chronic CNFU^b 	Preference for unique vs common exterior designs	<ul style="list-style-type: none"> • Individuals high in CNFU prefer unique over common exterior designs
Lynn and Harris (1997a, 1997b) <i>Scale development</i>	<ul style="list-style-type: none"> • Chronic DUCP^c 	Preference for scarce, new and customized vs non-scarce, outdated and massive products	<ul style="list-style-type: none"> • Individuals high in DUCP prefer scarce, new and customized products over non-scarce, outdated and massive products
Maimaran and Wheeler (2008)	<ul style="list-style-type: none"> • Contextual NFU, <i>manipulated through</i> geometrical shape arrays • Chronic CNFU (Tian <i>et al.</i>, 2001) 	Preference for unique vs common objects	<ul style="list-style-type: none"> • Individuals high in CNFU or primed with uniqueness tend to choose more unique objects
Chan <i>et al.</i> (2012)	<ul style="list-style-type: none"> • Contextual NFU, <i>manipulated through</i> geometrical shape arrays (Maimaran and Wheeler, 2008) • Chronic CNFU (Tian <i>et al.</i>, 2001) 	Preference for more vs less popular options among social groups	<ul style="list-style-type: none"> • Individuals high in NFU prefer less popular options over more popular ones, among those options that are associated with their social group

Notes: ^aNFU: need for uniqueness (Snyder and Fromkin, 1977); ^bCNFU: consumer's need for uniqueness (Tian *et al.*, 2001); ^cDUCP: desire for unique consumer products (Lynn and Harris, 1997a, 1997b)

secular trends spanning decades and centuries” and “short run acceptance of specific styles lasting months to years.” Overall, the literature suggests that products can provide uniqueness benefits during different periods of time. For example, a bag with an iconic design that will project uniqueness for years, versus a bag with a special design that follows current trends but will likely not offer uniqueness when these trends become mainstream or change. Thus, when consumers high in NFU are shopping for unique products, they might be facing choices between products with different duration of uniqueness.

It is noteworthy that the long duration of uniqueness is different from the classicity and classiness of products. First, classics are “very basic styling concepts that have received long-term acceptance across virtually all market segments” and are far from being unusual (Sproles, 1981, p. 118). They tend to provide benefits that spread during a long period of time but relate to well-accepted conformity, rather than to uniqueness. Second, research defines classiness as a belief about brands (Batra and Homer, 2004) that pertains mostly to the “sophistication” dimension of a brand personality (Aaker, 1997; Diamantopoulos *et al.*, 2005). This dimension includes traits such as upper-class and glamorous but has no connection to duration or uniqueness (Aaker, 1997). Indeed, uniqueness is part of “excitement,” a different brand personality dimension (Aaker, 1997). Thus, literature does not suggest that classiness relates to the long duration of uniqueness.

Joint effects of pressure and need for uniqueness on choices of unique products

Research suggests that pressure makes motivated individuals focus on the comparison of relevant benefits (Bronner, 1982; Maule and Svenson, 1993) and salient differences between options (Dhar and Nowlis, 1999). As the duration of uniqueness is a characteristic that is relevant for high-NFU consumers and that differentiates unique products (Pesendorfer, 1995; Sproles, 1981), high-NFU consumers are more likely to focus on differences with respect to duration of uniqueness under higher, than under lower pressure. In this case, these consumers would notice the advantage of products with a long duration of uniqueness. Thus, higher pressure, in comparison to lower pressure, can increase the tendency of high-NFU consumers to choose products with longer, over those with shorter duration of uniqueness.

However, under lower pressure, consumers may consider greater amounts of information (Iyer, 1989) and compare other aspects of the decision (Bettman *et al.*, 1993). This increased scrutiny may lead consumers to perceive new differences created by the direct comparison of options at the moment of choice because in direct comparisons one option can serve as an anchor for the other (Epley and Gilovich, 2006, p. 312). In the setting of this research, duration of uniqueness would be only one of the factors that influence the decision of high-NFU consumers under lower pressure. The degree of uniqueness benefits may be another one. Although products that differ in duration of uniqueness may still offer the same degree of uniqueness (something controlled for in our studies through pre-testing), products with a short duration of uniqueness could be perceived as more unique, novel (Thompson and Haytko, 1997; Tian *et al.*, 2001) and distinct (Simmel, 1957) than those with long duration of uniqueness, in a direct comparison setting (Epley and Gilovich, 2006). These perceptions can occur because products with a short duration of uniqueness might be in-fashion (Pesendorfer, 1995). When high-NFU consumers consider the differences in both duration of uniqueness and degree of uniqueness (in direct product comparisons), the former may be less impactful. Consequently, high-NFU consumers may focus less on the duration of uniqueness under lower pressure, than under higher pressure. Therefore, these consumers will tend to choose relatively more products with a short duration of uniqueness under lower pressure.

As unique choices and thus, duration of uniqueness, are less important to low-NFU consumers (Gentina *et al.*, 2016; Snyder and Fromkin, 1980), pressure is not expected to affect their choice of unique products.

We hypothesized (summarized in Figure 1):

- H1. Pressure and NFU interact to affect the choice between products with long and short duration of uniqueness. Higher pressure, in comparison to lower pressure, will increase the tendency of high-NFU, but not low-NFU, consumers to choose products with long over a short duration of uniqueness.

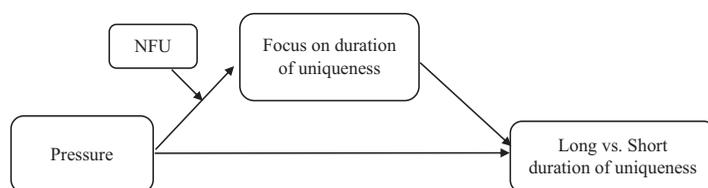


Figure 1. Conceptual model

- H2*. Changes in the focus of evaluation mediate this interaction. High-NFU consumers will focus more on the duration of uniqueness and, thus, tend to choose relatively more products with a long over a short duration of uniqueness under higher pressure, than under lower pressure.

Overview of studies

This research uses a multi-method study approach to study how the interaction between pressure and NFU affects the choice between products that differ in duration of uniqueness. A pilot field-study established the novelty and relevance of the proposed hypotheses for professionals selling unique products. Study 1 was a correlational retrospective study that gathered data about real recent purchases of unique products to assess the importance of duration of uniqueness in the evaluation of unique product choices. Moreover, this study sought initial evidence that consumers high in NFU would find the duration of uniqueness more important for the purchase of unique products under higher than under lower pressure. Studies 2 and 3 experimentally tested *H1*: whether higher pressure, in comparison to lower pressure, would increase the tendency of high-NFU, but not low-NFU, consumers to choose products with long over a short duration of uniqueness. Studies 3 and 4 used consequential choice tasks. Study 4 also provided initial support for *H2* by testing if under higher pressure, high-NFU consumers would choose based on the advantage of a long duration of uniqueness product and if under lower pressure, they would shift away from this choice. Finally, Study 5 directly tested the process proposed in *H2*: whether high-NFU consumers would focus more on the duration of uniqueness under higher pressure, in comparison to lower pressure and whether this focus would increase their tendency to choose the product with a longer (vs shorter) duration of uniqueness. Across all the experimental studies, the products used in the choice tasks were pre-tested to ascertain that duration of uniqueness varied as intended while controlling for other dimensions (e.g. degree of uniqueness and durability). These pre-tests are detailed in [Appendix 1](#). Taken together, our studies used a multi-method approach that established causal relationships, used consequential choice tasks and considered diverse online panels.

Pilot field-study

This study aimed to check whether our predictions were novel and important to retail professionals of luxury products, an industry that offers highly unique products ([Liu et al., 2012](#); [Phau and Prendergast, 2000](#)) and whether these professionals consider products with a long duration of uniqueness a better investment for consumers.

Method

Participants. In total, 31 professionals (67.7% women, $M_{\text{age}} = 32.10$, $SD = 6.68$) from stores such as Dior and Prada, that sell products with varying durations of uniqueness, participated in a single-factor (higher vs lower pressure) between-subjects experiment.

Procedure. Professionals were approached at work during low-traffic shopping hours and voluntarily completed a 5-min questionnaire about a hypothetical high-NFU consumer in their store, choosing between two products with long versus short duration of uniqueness. For half of the participants, the hypothetical consumer had to decide *now*, so he/she was under higher pressure. For the other half, the hypothetical consumer had to decide *now or later*, so he/she was under lower pressure ([Appendix 2](#)). Then, professionals predicted the consumer's choices (i.e. "long duration of uniqueness product," "short duration of uniqueness product," or "do not know"), rated how useful this prediction was for their

business (on a seven-point scale), indicated which product they thought was a better investment for the consumer (i.e. “long duration of uniqueness product,” “short duration of uniqueness product,” or “equal”) and provided background information (e.g. years of experience, knowledge about fashion and demographics). All questionnaires were completed uninterruptedly at participants’ own pace.

Results and discussion

Results of this study indicated that the choice predictions of these professionals were not the same as the ones implied by our hypotheses. Specifically, predicted choice shares of retail professionals did not significantly differ between the higher- and lower-pressure conditions (higher-pressure: long duration of uniqueness = 33.3%, short duration of uniqueness = 53.3%, do not know = 13.3%; lower-pressure: long duration of uniqueness = 50.0%, short duration of uniqueness = 37.5%, do not know = 12.5%; $p > 0.62$). These results were not statistically significant and were directionally opposite to our hypotheses.

A potential reason for this discrepancy is that our hypotheses were novel for junior or non-expert retail professionals, but they might be predictable for senior or expert ones because of their frequent interaction with buyers of unique products. To test this possibility, we examined whether professionals’ experience ($M_{\text{experience}} = 8.40$ years, $SD = 5.84$) and knowledge about fashion ($M_{\text{knowledge}} = 5.90/7$, $SD = 1.01$) would make professionals’ predictions more aligned with the hypothesized choice pattern. Analyses showed no significant interaction effects between pressure and experience ($\beta = 0.04$, $t = 0.68$, $p > 0.50$) or pressure and knowledge ($\beta = 0.02$, $t = 0.06$, $p > 0.94$) on the predicted choice. Another possibility could be that women and younger individuals would better at predicting our hypotheses because they tend to be more involved in fashion than men and older individuals, respectively (Auty and Elliott, 1998; O’Cass, 2004). Again, there were no significant interaction effects between pressure and gender ($\beta = -0.41$, $t = -1.03$, $p > 0.31$) or pressure and age ($\beta = 0.08$, $t = 1.36$, $p > 0.18$) on the predicted choice. These results suggested that our hypotheses were novel to retail professionals of unique products, from all backgrounds and demographics.

Finally, these professionals thought that predicting the choices described to them would be useful for their business[2] ($M = 5.50 > 4$ -mid-point, $SD = 1.53$; $t(25) = 5.00$, $p < 0.001$). Moreover, they also thought that products with long duration of uniqueness were better investments for consumers high in NFU (long duration of uniqueness = 67.7%; short duration of uniqueness = 25.8%; equal = 6.5%; $\chi^2(2) = 18.26$, $p < 0.001$). Analyses showed that neither experience ($\beta = -0.005$, $t = -0.30$, $p > 0.77$), knowledge ($\beta = 0.01$, $t = 0.14$, $p > 0.89$), gender ($\beta = -0.04$, $t = -0.24$, $p > 0.81$), nor age ($\beta = 0.02$, $t = 1.30$, $p > 0.21$) significantly influenced perceived usefulness. Hence, our hypotheses seemed to be both novel and useful to specialized retail professionals of unique products. Having established the managerial importance of our research, the following study tested if the duration of uniqueness in comparison to other benefits is relevant for the choice of unique products.

Study 1

This study examined real consumer purchases retrospectively and had three goals. First, to collect data about real and recent unique purchases to understand how important the duration of uniqueness is for consumers during unique product choices relative to other, related benefits. Second, to provide initial evidence on whether participants high in NFU would report that duration of uniqueness was more important for them when purchasing a unique product when they felt higher rather than lower pressure. Third, to illustrate that the aforementioned effect is specific to duration of uniqueness and does not hold for potentially

related constructs, such as durability – which usually refers to the useful life of a product (Brucks *et al.*, 2000; Guru and Paulssen, 2020; Molina-Castillo *et al.*, 2013). If effects on these variables are divergent, this would support that the two constructs are distinct.

Method

Participants. In total, 78 participants (55.10% women, $M_{\text{age}} = 30.49$, $SD = 12.18$) who were consumers of luxury products, were recruited through the online participant recruitment platform Prolific Researcher, in exchange for a monetary compensation aligned with current suggestions, as in all studies (Goodman and Paolacci, 2017).

Procedure. The study consisted of an online survey. As such, it did not manipulate any factor. It was conducted in June 2020, during the Covid-19 pandemic. Participants were asked to recall an actual recent purchase of a unique product they made as the pandemic broke out, to ensure that the purchase was recent. After reporting their purchase, participants were asked to evaluate on seven-point scales the importance (1 = not important at all; 7 = very important) of four benefits relevant for the purchase of unique products: uniqueness, prestige, credibility and intimacy (Bairrada *et al.*, 2018; Berthon *et al.*, 2009). They were also asked to do the same for the duration of uniqueness (the target benefit) and durability (a potentially related benefit). Then, following established research (Clement *et al.*, 2017) we measured subjective perceptions of pressure by asking participants to report their feelings of pressure during the purchase, on two seven-point scales adapted from Yao and Oppewal (2016): “Were you in a rush when making the purchase of [product]?” and “How much pressure did you feel when making the purchase of [product]?” Subsequently, participants completed the scale of avoidance of similarity (Tian *et al.*, 2001; Tian and McKenzie, 2001; $\alpha = 0.95$) which captures whether consumers have an interest in common products (Roy and Rabbanee, 2015; Tian *et al.*, 2001) and served as our measure of NFU. Finally, participants answered if they think that duration of uniqueness is different from durability with the question “Do you think that how long a product can help someone to differentiate from others, can be different from how long the product lasts?” (“yes” or “no”).

Results

Importance of different benefits. A one-way repeated measures ANOVA with product benefits (duration of uniqueness vs uniqueness vs durability vs intimacy vs credibility vs prestige) as within factor showed that these six benefits differed in their importance ($F(1, 73) = 7.180$, $p < 0.0001$) for the purchase participants reported. Pairwise contrasts further showed that besides durability ($M_{\text{Durability}} = 5.14$, $SD_{\text{Durability}} = 1.86$, $p = 0.01$), duration of uniqueness was of similar importance to other, established benefits of unique products ($M_{\text{Duration of uniqueness}} = 4.03$, $SD_{\text{Duration of uniqueness}} = 2.14$; $M_{\text{Uniqueness}} = 4.35$, $SD_{\text{Uniqueness}} = 2.06$, $p = 0.93$; $M_{\text{Intimacy}} = 3.40$, $SD_{\text{Intimacy}} = 2.08$, $p = 0.40$; $M_{\text{Credibility}} = 4.29$, $SD_{\text{Credibility}} = 2.09$, $p = 0.96$; $M_{\text{Prestige}} = 3.58$, $SD_{\text{Prestige}} = 2.10$, $p = 0.75$).

Perceived differences between duration of uniqueness and durability. We analyzed if participants think that there are differences between duration of uniqueness and durability. A chi-square test revealed a significant effect ($\chi^2(1) = 52.513$, $p < 0.0001$); 91% of participants thought that the duration of uniqueness is different than durability.

Hypothesis testing. A regression with feelings of pressure, NFU and their interaction as independent variables and the importance of duration of uniqueness (1 = not important at all; 7 = very important) as the dependent variable, showed a significant main effect of pressure ($\beta = -0.72$, $t = -2.32$, $p < 0.03$), qualified by a significant interaction effect between pressure and NFU ($\beta = 0.35$, $t = 2.55$, $p < 0.02$). A spotlight analysis at 1 standard deviation above and below the mean of NFU score showed that for high-NFU participants,

duration of uniqueness was more important for their purchase under higher than under lower pressure ($M_{\text{higher-pressure}} = 5.31$, $M_{\text{lower-pressure}} = 3.41$; $\beta = 0.48$, $t = 2.13$, $p < 0.04$; Figure 2). The pressure did not significantly affect the importance of duration of the uniqueness of low-NFU participants ($M_{\text{higher-pressure}} = 2.80$, $M_{\text{lower-pressure}} = 4.13$; $p = 0.07$). A similar regression, with the sole difference of having importance of durability as the dependent variable, revealed no significant interaction effect between pressure and NFU ($\beta = 0.19$, $t = 1.52$, $p < 0.13$).

Discussion

This retrospective study showed that, first, consumers find that duration of uniqueness is as important as other established benefits relevant to the choices of unique products, such as uniqueness, prestige, credibility and intimacy (Bairrada et al., 2018; Berthon et al., 2009). Second, consumers perceive the duration of uniqueness and durability differently. Third, this study provided initial support for our theory: high-NFU participants find that duration of uniqueness is more important for the purchase of unique products under higher than under lower pressure. These results do not hold for durability. Finally, this study gathered data from real purchases for a variety of products ranging from expensive ones, such as plane tickets and luxury sunglasses, to inexpensive ones such as backpacks and agendas, which added to the generalizability of our findings. Despite these contributions, the correlational setting of this study could not establish causation as it suffers from important limitations (e.g. recall bias or lay theories of consumers). To avoid these limitations, subsequent studies tested our hypotheses by using experimental designs, pre-tested pairs of products, consequential choices tasks and diverse online panels.

Study 2

This study was designed to provide a strong test for *H1* which predicted an interaction between pressure and NFU (Snyder and Fromkin, 1977) on the choice between products with long and short duration of uniqueness. Specifically, for this study only, the product with a long duration of uniqueness was deliberately tested *a priori* to be advantageous not only in terms of duration of uniqueness but also in other dimensions. Given these advantages, a natural expectation would be that consumers would tend to choose more often the product that offered a long duration of uniqueness together with other benefits,

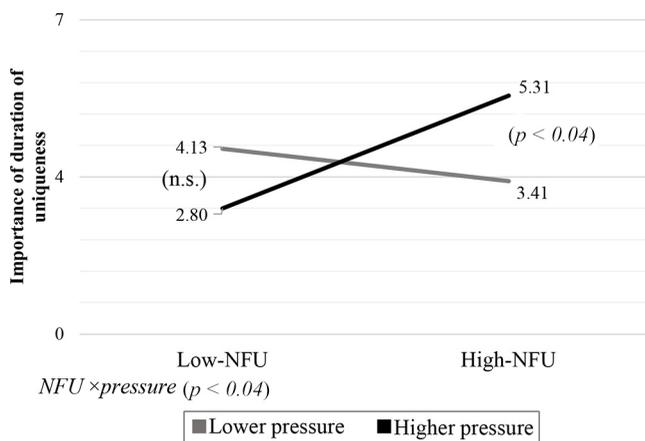


Figure 2. Study 1: How the interaction between pressure and NFU influences the importance of duration of uniqueness

regardless of any difference in pressure and NFU. Instead, we expected that even for this choice, pressure could shift high-NFU individuals' focus on the differences between the two products. In this case, we should still observe an interaction between pressure and NFU: the product with a longer duration of uniqueness (i.e. the advantageous product) would be chosen more often by high-NFU participants under higher, than under lower pressure. Therefore, this study provided a conservative test of whether high-NFU participants place more emphasis on the differentiating and relevant dimensions of a choice task, such as duration of uniqueness, under higher than under lower pressure. This study also used a different measure of NFU to extend the generalizability and validity of the results.

Tests – stimuli development

In a first test, 98 participants (52.44% women, $M_{\text{age}} = 35.97$, $SD = 11.57$) were recruited through the online platform Amazon Mechanical Turk in exchange for monetary compensation. Participants evaluated the picture and description of a dress-shirt, in a two-cell between-participants design. The dress-shirt with long (vs short) duration of uniqueness was described as providing uniqueness for “many years” (vs “the current season”; [Appendix 3](#)). Each dress-shirt was tested for duration and degree of uniqueness, liking, purchase likelihood, difficulty in obtaining, commonness, status perceptions and willingness to pay ([Appendix 1](#)). Analyses showed that the dress-shirt with a long duration of uniqueness was more attractive than the dress-shirt with a short duration of uniqueness in several relevant dimensions. It exhibited a significantly higher perceived duration of uniqueness ($p < 0.02$), difficulty to obtain ($p < 0.04$) and status ($p < 0.002$). No other significant differences were found (all $ps > 0.14$). In a second test, 77 participants (49.40% women, $M_{\text{age}} = 35.04$, $SD = 18.48$) were recruited through Amazon Mechanical Turk in exchange for monetary compensation. Participants were randomly assigned in a two-cell between-participants design and evaluated one of the two pictures and descriptions of the dress-shirt described above for durability and classiness. Analyses showed no significant differences between the two versions in terms of durability ($p > 0.99$) or classiness ($p > 0.79$).

Tests – pressure manipulation development

To determine the exact amounts of time for the higher- and lower-pressure conditions, we tested how much time participants needed to go through the dress-shirts stimuli. The average time was approximately 20 s. To make sure that all participants would have enough time to make a choice (i.e. they would not just choose randomly), we added 1 standard deviation (20 s approx.) to this average time for the higher-pressure condition and 2 standard deviations for the lower-pressure condition. Following this procedure, participants in the higher-pressure condition had 40 s and participants in the lower-pressure condition had 60 s to go through the stimuli and choose.

Method

Participants. In total, 218 participants (45.90% women, $M_{\text{age}} = 36.04$, $SD = 11.79$) recruited through Amazon Mechanical Turk in exchange for monetary compensation were randomly assigned to a two-cell between-subjects design (higher vs lower pressure).

Procedure. Participants saw the two tested dress-shirts stimuli next to each other in random order and were asked to choose one. The pressure was manipulated via time availability (similarly to [Yao and Oppewal, 2016](#)), as described above. In addition, participants in the higher-pressure condition were told that they had “just enough” time to decide, whereas those in the lower-pressure condition were told that they had “enough” time to decide. After choosing, participants completed a manipulation check (seven-point scale;

“To what extent did you feel time pressure while you were choosing the dress-shirt?”) and the NFU scale (Snyder and Fromkin, 1977; $\alpha = 0.85$).

Results

Manipulation check. Participants in the higher-pressure condition felt more pressure ($M_{\text{higher-pressure}} = 4.07$) than those in the lower-pressure one ($M_{\text{lower-pressure}} = 3.09$; $p < 0.001$).

Hypotheses testing. Logistic regression with pressure (0 = lower; 1 = higher), NFU and their interaction as independent variables, on choice (0 = short duration of uniqueness; 1 = long duration of uniqueness) revealed significant main effects of pressure ($\beta = -4.79$, $t = -2.29$, $p < 0.03$) and NFU ($\beta = -0.96$, $t = -2.19$, $p < 0.03$), qualified by a significant interaction effect ($\beta = 1.58$, $t = 2.42$, $p < 0.02$). A spotlight analysis at 1 standard deviation above and below the mean NFU score showed that, as predicted, high-NFU participants chose more (vs less) often the product with long (vs short) duration of uniqueness under higher than under lower pressure (probability choice of product with long duration of uniqueness: higher pressure = 65.7%, lower pressure = 42.1%; $\beta = 0.97$, $t = 2.34$, $p < 0.02$; Figure 3). Choices of low-NFU participants were unaffected by pressure (probability of choice of product with long duration of uniqueness: higher pressure = 52%, lower pressure = 63.4%; $p > 0.24$).

Discussion

Under conservative conditions, Study 2 supported our first hypothesis. Participants under higher pressure were more likely to choose the product with a high duration of uniqueness. Under lower pressure, the choices of high-NFU consumers shifted in favor of the product with a short duration of uniqueness: 23.6% more high-NFU participants chose the (tested to be inferior) product with a short duration of uniqueness under lower-pressure than under higher-pressure conditions. This indicates that pressure made high-NFU participants consider differences between the two options more.

As the stimuli used in this study (i.e. dress-shirts) was male-oriented, perhaps the results were influenced by the responses of female participants, for whom the option could be less relevant. Although women typically influence and choose unique products for men (Dennis et al., 2009), additional analyzes were performed considering only male respondents. The pattern of results remains identical, but the statistical significance of the interaction effect drops to 0.08. This is expected because the sample size was reduced approximately by half.

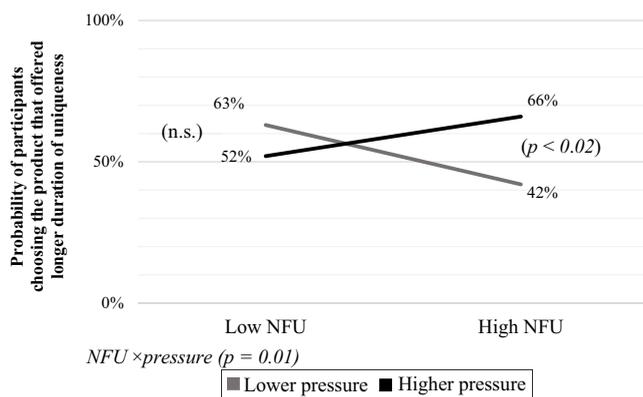


Figure 3. Study 2: How the interaction between pressure and NFU influences the choice between products with long (vs short) duration of uniqueness

Study 3 further examined *H1* by using products that were gender-neutral and only differed in the duration of uniqueness.

Study 3

The purpose of this study was to replicate the above findings and to increase their generalizability and validity in three ways. First, this study involved a consequential choice task, simulating as much as possible a real-life choice in the context of an online purchase; all participants were informed that they would be able to get their chosen product. Second, this study considered a pair of gender-neutral, affordable products (i.e. phone cases) in which the product with a long duration of uniqueness was tested *a priori* to be advantageous in terms of duration of uniqueness. Third, the pressure was manipulated with a different variation of time pressure: participants had either limited or unlimited time to decide (Yao and Oppewal, 2016).

Pre-test - stimuli development

A total of 88 participants (35.2% women, $M_{\text{age}} = 34.18$, $SD = 9.02$) were recruited through the online platform CloudResearch in exchange for monetary compensation to participate in this pre-test. Participants evaluated the description of a phone case, in a two-cell between-participants design. The phone case with a long (vs short) duration of uniqueness was described as providing uniqueness for “many years” (vs “the next few weeks”; Appendix 4). Each phone case was pre-tested for the duration of uniqueness and the degree of uniqueness, liking, durability and classiness (Appendix 1). Analyses showed that the phone case with a long duration of uniqueness was significantly rated as having a higher duration of uniqueness than the dress-shirt with a short duration of uniqueness ($M_{\text{Short}} = 4.47$ vs $M_{\text{Long}} = 5.27$; $p < 0.03$). No other significant differences were found (all $ps > 0.62$).

Tests – pressure manipulation development

The length of the descriptions and the details of the stimuli differed from previous ones (i.e. dress-shirts). Thus, to determine the exact amount of time to allocate to the higher-pressure condition, we pre-tested how long participants needed to read the phone case stimuli. The average time was approximately 14 s. To make sure that participants would have enough time to make a choice, we added 1 standard deviation (approximately 16 s) to this average time resulting in a limit of 30 s for the higher-pressure condition. Participants in the lower-pressure condition did not have a time limit.

Method

Participants. In total, 144 participants (35.40% women, $M_{\text{age}} = 37.01$, $SD = 10.13$) recruited through CloudResearch in exchange for monetary compensation were randomly assigned to a two-cell between-participants design (higher vs lower pressure).

Procedure. Participants were asked to imagine that they were shopping online for a phone case and read the description of the two phone cases presented in random order next to each other. After reading, participants chose the phone case they liked more knowing that they would receive the chosen case. The pressure was manipulated via time availability closely following Yao and Oppewal (2016), as described above. After choosing the case they liked, participants completed a manipulation check (seven-point scale; “To what extent did you feel pressure while you were choosing the phone case”) and the scale for the avoidance of similarity (Tian *et al.*, 2001; Tian and McKenzie, 2001; $\alpha = 0.96$) which served as our measure of NFU.

Results

Manipulation check. Participants in the higher-pressure condition felt more pressure ($M_{\text{higher-pressure}} = 5.36$) than those in the lower-pressure one ($M_{\text{lower-pressure}} = 4.10$; $p < 0.0001$).

Hypotheses testing. Logistic regression with pressure (0 = lower pressure; 1 = higher pressure), NFU and their interaction as independent variables on choice (0 = short duration of uniqueness; 1 = long duration of uniqueness) showed a significant main effect of NFU ($\beta = -1.01$, $t = -3.34$, $p < 0.001$), qualified by a significant interaction effect between pressure and NFU ($\beta = 0.79$, $t = 2.11$, $p < 0.04$). A spotlight analysis at 1 standard deviation above and below the mean NFU score showed that high-NFU participants tended to like more the product with a long duration of uniqueness under higher than under lower pressure (probability of choice of product with long duration of uniqueness: higher pressure = 65%, lower pressure = 41%; $\beta = 1.01$, $t = 2.00$, $p < 0.05$). The pressure did not significantly affect the choices of low-NFU participants (probability of choice of product with long duration of uniqueness: higher pressure = 78%, lower pressure = 93%; $p > 0.12$).

Discussion

This study provided further support for *H1* with a consequential choice task in the context of online purchase of a gender-neutral and affordable product. The next study examined *H1* in another setting and provided an initial test for the process behind the hypothesized effect.

Study 4

Study 4 tested *H1* with three modifications relative to previous studies. First, this study used a different consequential choice: a raffle (Tian *et al.*, 2001) in which winners receive their chosen product. Second, we manipulated psychological time pressure (instead of time availability), keeping available time constant for all participants. Finally, tests using both separate and comparative evaluations were performed to show that:

- the focus on the long duration of uniqueness advantage persists in both settings, whereas
- products with a short duration of uniqueness may be perceived as more unique only when directly compared to their counterparts, as one serves as an anchor for the other (Epley and Gilovich, 2006).

We expected high-NFU consumers to choose based on the objective duration advantage under higher pressure, but to shift away from this choice under lower pressure.

Tests - stimuli development

Separate evaluations test. In the first test, 82 female participants ($M_{\text{age}} = 35.21$, $SD = 10.96$) were recruited through Amazon Mechanical Turk in exchange for monetary compensation. Participants evaluated the description of a cross-body bag, in a two-cell between-participants design. The bag with long (vs short) duration of uniqueness was described as providing uniqueness “for many years” (vs “for the current season”; Appendix 5). Each bag was pre-tested for the duration and degree of uniqueness, as well as liking, purchase likelihood, difficulty in obtaining, commonness, status perceptions and willingness to pay (Appendix 1). The bag intended to provide a longer duration of uniqueness was effectively rated as having a significantly higher duration of uniqueness than the bag with a shorter duration of uniqueness ($M_{\text{Short}} = 3.67$ vs $M_{\text{Long}} = 4.51$; $p < 0.02$). No other significant differences emerged (all $ps > 0.19$). In a second test, 81 participants (58% women, $M_{\text{age}} = 33.67$, $SD = 10.93$) were recruited through Amazon Mechanical Turk in exchange for

monetary compensation. Participants were assigned in a two-cell between-participants design and evaluated one of the two descriptions of the cross-body bag in terms of durability and classiness. Analyzes showed no significant differences between the bag with long vs the bag with short duration of uniqueness in terms of durability ($p > 0.29$) and classiness ($p > 0.55$).

Comparative evaluations test. In total, 68 female participants ($M_{\text{age}} = 33.29$, $SD = 8.82$) were recruited through Amazon Mechanical Turk in exchange for monetary compensation. Participants directly compared the two cross-body bags in the same dimensions as the separate evaluations test, on seven-point scales (later coded from -3 to 3), with the bags with short and long duration of uniqueness as the low and high anchors, respectively. Analyzes revealed that the advantage of the product with a long duration of uniqueness persisted in comparative evaluations. This product was considered to offer a longer duration of uniqueness, with the average of the comparative measure being greater than the scale midpoint ($p < 0.04$). As expected, the product with a short duration of uniqueness was perceived as more unique than the one with a long duration of uniqueness, with the average of the comparative measure being lower than the scale midpoint ($M = -0.51 < 0$; $t(67) = -2.37$; $p < 0.03$), although this difference was not significant in separate evaluations. Thus, while in both evaluations the product with a long duration of uniqueness was perceived to offer longer uniqueness, in comparative evaluations only, a perceived advantage in uniqueness degree emerged for products with a short duration of uniqueness. Then, if high-NFU consumers consider this difference under lower pressure, these consumers will tend to choose relatively more the option that provides a short duration of uniqueness.

Tests – pressure manipulation development

The length of the descriptions and details of these stimuli differed from the previous studies. Thus, to determine the exact amounts of time for the higher- and lower-pressure conditions, we pre-tested how long participants needed to read the bag stimuli. The average time was approximately 40 s. To make sure that participants would have enough time to make a choice we added 1.5 standard deviations (approximately 40 s) to this average time. Thus, all participants had 80 s to choose from. To manipulate pressure, instead of varying the amount of time available, we varied the perception that the given amount (i.e. 80 s) was enough or not (Briley and Aaker, 2006).

Method

Participants. In total, 342 female participants ($M_{\text{age}} = 35.94$, $SD = 11.41$) recruited through Amazon Mechanical Turk in exchange for monetary compensation were randomly assigned to a two-cell between-participants design (higher vs lower pressure).

Procedure. Participants read the description of the two bags presented in random order next to each other. Following established procedures (Tian *et al.*, 2001), after reading the bag descriptions, participants chose one of the bags knowing that two participants, selected at random, would receive the bag of their choice. The pressure was manipulated via psychological time pressure closely following Briley and Aaker (2006), as described above. Specifically, for the higher- (vs lower-) pressure condition we told participants that “Most people take about 120 (vs 80) s to read the descriptions and choose”. After reading these instructions, participants chose one of the cross-body bags. Next, participants completed the manipulation check (seven-point scale; “To what extent did you feel time pressure while you were choosing the bag?”), the scale for the avoidance of similarity (Tian *et al.*, 2001; Tian and McKenzie, 2001; $\alpha = 0.97$) which served as our measure of NFU and the social aspect of the

risk-attitude scale (Weber *et al.*, 2002; $\alpha = 0.73$), to control for the effect of risk-taking behavior on choices as an alternate explanation.

Results

Manipulation check. Participants in the higher-pressure condition ($M_{\text{higher-pressure}} = 4.45$) felt more pressure than those in the lower-pressure one ($M_{\text{lower-pressure}} = 3.77$; $p < 0.001$).

Hypotheses testing. Logistic regression with pressure (0 = lower pressure; 1 = higher pressure), NFU and their interaction as independent variables on choice (0 = short duration of uniqueness; 1 = long duration of uniqueness) showed a significant main effect of NFU ($\beta = -0.50$, $t = -2.75$, $p < 0.01$), qualified by a significant interaction effect between pressure and NFU ($\beta = 0.49$, $t = 2.04$, $p < 0.05$). A spotlight analysis at 1 standard deviation above and below the mean of NFU score showed that high-NFU participants tended to choose more the product with long duration of uniqueness under higher than under lower pressure (choice of product with long duration of uniqueness: higher pressure = 69%, lower pressure = 52%; $\beta = 0.72$, $t = 2.23$, $p < 0.02$; Figure 4). The pressure did not affect the choices of low-NFU participants (probability if the choice of product with long duration of uniqueness: higher pressure = 69%, lower pressure = 74%; $p > 0.48$).

Analyzes including the risk-taking attitude as a covariate showed identical results. The interaction between pressure and NFU ($\beta = 0.49$, $t = 2.03$, $p < 0.05$) and the conditional effect of pressure on choice for high-NFU participants ($\beta = 0.72$, $t = 2.23$, $p < 0.03$) remained significant. Risk-taking attitudes did not affect the choice between products ($\beta = -0.02$, $t = -0.10$, $p > 0.91$). These results ruled out risk-taking attitudes as an alternate explanation.

Discussion

The results of study 4 further supported *H1*. Moreover, this study indirectly showed that high-NFU participants under higher pressure choose relying on the duration of uniqueness advantage, while under lower pressure they shift away from this advantage. The next study was designed to test the proposed mechanism by examining the thoughts participants had while choosing.

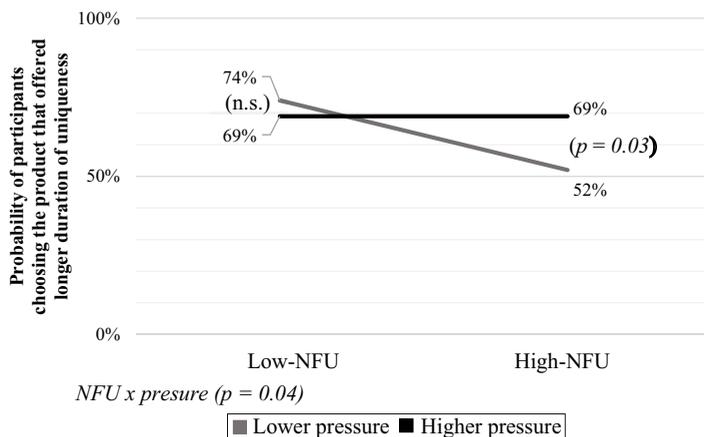


Figure 4. Study 4: How the interaction between pressure and NFU influences the choice between products with long (vs short) duration of uniqueness

Study 5

Study 5 explored a different form of pressure and established the theoretical mechanism in two ways. First, the pressure was manipulated via product availability (Lynn, 1991). Second, uniqueness was primed instead of measured and participants' thoughts while making a choice were recorded. These thoughts were later coded depending on whether they were related to the duration of uniqueness. Research suggests that product benefits that influence choice are more likely to be recalled fast and easily (Higgins, 1996; Lynch *et al.*, 1988; Petty and Cacioppo, 1981). Hence, we predicted that participants primed with uniqueness would report thinking more about the duration of uniqueness when deciding under higher than under lower pressure (i.e. under low than under high product availability) and that a higher number of such thoughts would predict the greater choice likelihood of the option offering longer uniqueness duration. This study used the same stimuli as study 4.

Method

Participants. In total, 312 female participants ($M_{\text{age}} = 35.7$, $SD = 11.78$) recruited through Amazon Mechanical Turk in exchange for monetary compensation were randomly assigned to a 2 (prime: uniqueness vs homogeneity) \times 2 (product availability: higher vs lower) between-subjects experiment.

Procedure. First, following an established procedure, participants were primed with either uniqueness or homogeneity (Maimaran and Wheeler, 2008). Participants saw a series of eight shapes. For the uniqueness priming, one shape in each sequence was different than the rest (e.g. OOOO-OO). For the homogeneity priming, all shapes were identical (e.g. OOOOOOO). Participants had to count and report the number of circles and squares in each sequence. Next, to enhance the priming, participants saw four pairs of letter strings, each pair consisting of a word and a non-word. Participants had to press "F" or "J" on the computer keyboard if the word was on the left or right, respectively. For the uniqueness priming, letter strings were synonyms of "unique" (i.e. "distinctive" vs "dostinctive"). For the homogeneity priming, letter strings were synonyms of "homogeneous" (i.e. "uniform" vs "aniform"). Next, because consumers feel more pressure when they choose from products that are almost out of stock versus in stock (Kristofferson *et al.*, 2016; Roux *et al.*, 2015), the pressure was manipulated via the availability of product supply. Participants were informed verbally and graphically that the supply for the two bags they were choosing was very limited (vs adequate) for the higher (vs lower) pressure conditions. Then, participants were instructed to choose and write the thoughts they had while choosing. Finally, they completed a manipulation check (seven-point scale; "To what extent did you feel pressure while you were choosing a bag, given the available stock for the two bags?").

Results

Manipulation check. Participants in the higher-pressure condition ($M_{\text{higher-pressure}} = 3.09$) felt more pressure than those in the lower-pressure one ($M_{\text{lower-pressure}} = 2.57$; $p < 0.002$).

Hypotheses testing. The purpose of this study was to establish how much participants thought about the duration of uniqueness as the underlying mechanism for the findings. As thoughts that influence decisions tend to come up first (Higgins, 1996; Petty and Cacioppo, 1981), two independent coders, blind to the study conditions and predictions, were asked to code the participants' first two thoughts (following Wright, 1980). The coders were introduced to the concept of the duration of uniqueness and were told to look for instances when the participant indicated that she believed that the product would offer uniqueness for a long time. Participants' thoughts were coded as related to the duration of uniqueness when this characteristic was mentioned either explicitly (e.g. "I want something timeless but

unique”) or implicitly (e.g. “unique, works for every season”). When there were no such mentions (e.g. “I like cross-body bags”), thoughts were coded as unrelated to the duration of uniqueness. Coders’ agreement rate was 97.5% ($\kappa = 0.93, p < 0.001$) and disagreements were resolved through discussion. Participants listed a similar number of thoughts between the pressure conditions ($M_{\text{higher-pressure}} = 3.40$ vs $M_{\text{lower-pressure}} = 3.49; p > 0.60$), indicating that pressure did not influence the overall amount of thinking about the choice.

A moderated mediation analysis [Process model 8 for SPSS, Hayes (2013)] tested for the indirect effect of the interaction between pressure and uniqueness prime on choice, via a number of thoughts related to the duration of uniqueness. Pressure (0 = lower-pressure; 1 = higher-pressure) was the independent variable, priming (0 = homogeneity; 1 = uniqueness) the moderator, number of thoughts related to the duration of uniqueness the mediator and choice (0 = short duration of uniqueness; 1 = long duration of uniqueness) the dependent variable. Results showed a significant interaction effect between pressure and priming on the number of thoughts related to the duration of uniqueness ($\beta = 0.27, t = 2.03, p < 0.05$; Table 3) and a significant effect of the number of thoughts related to the duration of uniqueness on choice ($\beta = 1.00, t = 3.65, p < 0.001$). The confidence interval (CI) of this moderated mediation excluded zero (95% CI: 0.018 to 0.660, index = 0.27), indicating a significantly moderated mediation.

Next, we examined conditional indirect effects. For participants primed with homogeneity, the CI of the indirect effect included zero (95% CI: -0.171 to 0.215). Their thoughts about the duration of uniqueness did not differ between the pressure conditions ($M_{\text{higher-pressure}} = 0.43$ vs $M_{\text{lower-pressure}} = 0.41; p > 0.85$). However, as predicted, the CI of the indirect effect for participants primed with uniqueness excluded zero (95% CI: 0.085 to 0.612). Specifically, these participants listed relatively more thoughts about duration of uniqueness under higher versus lower pressure ($M_{\text{higher-pressure}} = 0.62$ vs $M_{\text{lower-pressure}} = 0.33, p < 0.01; \beta = 0.29, t(148) = 2.86, p < 0.01$). Then, more (vs fewer) thoughts related to the duration of uniqueness increased the tendency of choosing the product with long (vs short) duration of uniqueness ($\beta = 0.16, t(148) = 2.96, p < 0.01$).

1. Mediator variable model: dependent variable – number of duration thoughts				
Predictor	β	Lower CI	Upper CI	
Pressure	0.02 (0.09)	-0.17	0.20	
Priming	-0.08 (0.09)	-0.26	0.10	
Pressure \times Priming*	0.27 (0.13)	0.008	0.54	
2. Dependent variable model: dependent variable – choice (0 = short duration of uniqueness; 1 = long duration of uniqueness)				
Predictor	β	Lower CI	Upper CI	
Number of duration thoughts***	1.00 (0.27)	0.46	1.53	
Pressure	-0.16 (0.38)	-0.90	0.57	
Priming	-0.26 (0.37)	-0.98	0.47	
Pressure \times Priming	-0.02 (0.53)	-1.07	1.02	
3. Conditional indirect effect of pressure on choice for each priming				
Mediator	Priming	β	Lower CI	Upper CI
Number of duration thoughts**	Uniqueness	0.28 (0.13)	0.085	0.612
Number of duration thoughts	Homogeneity	0.02 (0.10)	-0.171	0.215

Notes: ^aNumbers in *italic* show the predicted significant moderated mediation path. Standard errors are shown in parentheses next to coefficient estimates; * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Table 3. Study 5: Moderated mediation analysis. Indirect effect showing a significant interaction effect between pressure and the uniqueness priming on the number of duration thoughts and a significant effect of the number of duration thoughts on choicea

Discussion

Study 5 supported $H2$ in a context in which both pressure and uniqueness were manipulated. This study showed that participants primed with uniqueness thought about the duration of uniqueness more under higher than under lower pressure. Subsequently, thinking about the duration of uniqueness increased the tendency of choosing the product with a long (vs short) duration of uniqueness, as the former offers a greater duration of uniqueness.

General discussion

A series of studies found that high-NFU consumers tend to choose relatively more products with a long duration of uniqueness under higher pressure and that this effect is mediated by a focus on the duration of uniqueness.

Theoretical contributions

This paper contributes to the literature on uniqueness consumption in several ways. First, this work adds to the conceptual development of the construct of uniqueness, by identifying the duration of uniqueness as a dimension with important consequences in unique product choices. Related research has studied how consumers form preferences for more versus less unique products (Snyder and Fromkin, 1980; Tian *et al.*, 2001; Tian and McKenzie, 2001; Whitley *et al.*, 2018) and how consumers respond to differences in the source of uniqueness-related signals (Berger and Ward, 2010; Gierl and Huettl, 2010; Han *et al.*, 2010). For instance, signals of supply-driven scarcity can increase evaluations of highly unique products, but signals of demand-driven scarcity can decrease evaluations of these products (Gierl and Huettl, 2010). The present study complements this research by identifying another important dimension of the benefit of uniqueness: duration of uniqueness. Overall, this investigation suggests that uniqueness is a multidimensional construct and its duration is an important dimension, alongside its degree and the source of conspicuous uniqueness-related signals.

Second, this investigation contributes to research on the importance of the duration of product benefits. Extant studies on duration have been mainly focused on the duration of product functional benefits (Yan *et al.*, 2014; Pena-Marín and Bhargava, 2016; Mittelman *et al.*, 2020). For instance, using round (vs precise) numbers to describe functional product characteristics can increase perceptions of durability (Pena-Marín and Bhargava, 2016). On the other hand, research on the duration of the symbolic benefits of products has been scarce. For instance, Berger and Le Mens (2009) study the duration of the relevance a cultural product has for one's identity. The present paper adds to this scarce literature studying duration of symbolic benefits and more specifically, uniqueness. While some extant research suggests that duration is a relevant aspect of uniqueness (Lynn and Snyder, 2002; Snyder, 1992; Snyder and Fromkin, 1980), our research is the first empirical attempt to investigate this construct.

Third, this research explores how two factors that often co-exist in the marketplace – pressure created by marketers and NFU of consumers – interact to affect choices. Hence, this study adds to the important findings of previous research, which examined independent effects of pressure (Zur and Breznitz, 1981; Cialdini and Garde, 1987; Dhar and Nowlis, 1999) and NFU (Chan *et al.*, 2012; Kauppinen-Räsänen *et al.*, 2018; Simonson and Nowlis, 2000) on decision-making. While the pressure literature suggests that consumers under pressure would hurry to buy an advertised product (Cialdini and Garde, 1987) and the uniqueness literature suggests that consumers high in NFU would prefer products with higher degrees of uniqueness (Snyder, 1992), our research is the first to explore their interaction.

These findings further add to research on pressure. Some studies show that pressure can lead to poor decisions (Baumeister, 1984; Lee and Yun, 2017). Yet, other studies show that pressure can lead to better outcomes (Eisenberger and Aselage, 2009; Locke and Bryan, 1967; Latham and Locke, 1975; Yao and Oppewal, 2016). Our results suggest that these differences in the effects of pressure may depend on different types of motivational drivers, such as NFU. Thus, this research contributes to this literature by showing that positive vs negative effects of psychological pressure may depend on the task's relevance for consumers.

Managerial, ethical and consumer implications

A pilot field-study suggested that retail professionals of unique products could not predict our findings but believed that this knowledge would have a positive effect on their business. Indeed, pressure-based appeals like those in our studies are frequent in the marketplace. For instance, Apple prompts its customers to “upgrade and exchange today” to the latest iPhone (i.e. time pressure) and Hermes highlights that their unique Birkin bags are produced in very limited quantities (i.e. scarcity pressure). Thus, our findings have implications for companies offering unique products in a variety of industries.

For managers, our results suggest that companies selling unique products could use pressure-based marketing appeals strategically depending on the company's goals and their product portfolio. For instance, pressure-based promotions would be more appropriate for the marketing of products with long uniqueness duration. However, using these appeals for the marketing of products with short uniqueness duration could decrease sales, as pressure obscures their symbolic benefits. Therefore, marketers of these products may want to refrain from using pressure marketing appeals.

We also warn for the consequences of the thoughtless implementation of these guidelines. In our pilot field-study, professionals believed that products with a longer duration of uniqueness (which are chosen more often under higher pressure) are better investments for consumers. However, this should not prompt managers to use misleading pressure-based marketing appeals (e.g. false claims about limited availability), even when they lead to choices that managers think are better for consumers. Besides being a questionable practice, falsely inducing high pressure can lead to stress (Zakay, 1993), choking (Baumeister, 1984) and overall customer dissatisfaction (Zboja *et al.*, 2016). Therefore, we urge managers to carefully consider the ethical use of pressure, as its consequences can be far more varied than a simple increase in sales.

On the other hand, managers could use pressure-based marketing appeals in an ethical manner, to promote positive long-term results. Our studies show that legitimate advertising claims that exert moderate levels of pressure can boost the choice of options that offer uniqueness for a long period. While these options can suit consumers' needs for longer, they may also be beneficial for the environment. For instance, in the fashion industry, managers could run a “limited time only” sales promotion for a product with a long uniqueness duration. Time pressure could make high-NFU consumers more prone to prefer this option and thus cover their NFU for a long period, reducing their need for repeated purchases. Hence, pressure could reduce the frequency of purchases of fashion products, which has a very negative environmental impact (Niinimäki *et al.*, 2020). In this way, pressure-based marketing appeals would contribute to a more sustainable way of consuming.

Limitations and future research directions

Although previous literature has tangentially discussed the duration of uniqueness (Pesendorfer, 1995; Simmel, 1957; Sproles, 1981), this research is a first systematic attempt to

shed light on this construct and on how consumers choose among unique products. As a first attempt to show the relevance of duration of uniqueness and of choices between unique products, this work has limitations that open avenues for fruitful future research. First, methodologically, parts of our research had limitations. For instance, our research partially rested on respondents' retrospection (e.g. Study 1), which may be subject to recall bias or lay theories, while the stimuli used in Studies 4 and 5 were gender-specific. We tried to address these limitations by providing empirical evidence with consequential choices (Studies 3 and 4) and with gender-neutral stimuli (Study 3), a practice that would also benefit future investigations of this and similar topics.

Second, this investigation is limited by examining sources of pressure that could be controlled by companies (e.g. limited time or product quantity). Future research could explore conditions under which other types of pressure, such as social pressure or competition, could produce different results. Social pressure and competition are sources of pressure that might highlight the role of others during the choice of unique products and as such they might enhance motivations for uniqueness even for consumers low in NFU, resulting thus to a main effect of pressure. Also, to avoid unwanted confounding effects, our studies did not include branded products. As brands can be important sources of uniqueness, future research could offer a deeper understanding of our findings using brands. For instance, future research could explore if our results hold for brands that are perceived as classy or sophisticated, as these can be potentially related to uniqueness.

Third, more studies are needed to understand how context-specific motivations may moderate the effects of pressure on consumers' choices. This research focuses on understanding the role of NFU on moderating the effects of pressure when choosing between unique products. At the same time, other uniqueness-related motivations such as the perceived importance of decisions between unique products or the projection of specific types of uniqueness (e.g. being an expert) might also moderate the effects of pressure.

Fourth, in this investigation, we focused on the study of duration of uniqueness as a symbolic benefit. We demonstrated that duration of uniqueness is important for the choices of unique products. Similarly, the duration of other important symbolic product benefits such as status, expertise or prestige might be relevant for future research as our study suggested that consumers are able to identify the duration of such benefits.

Fifth, given the importance of the duration of uniqueness, future investigations could examine other dimensions of uniqueness consumption, such as the strength of conspicuous signals, the purpose (to project status vs knowledge) and the audience (in-group vs out-group) of the consumption or the means of projecting uniqueness (e.g. price vs brand). Future research could examine how varying these dimensions may influence consumers' satisfaction with the product.

In conclusion, we believe that our work is a step toward building a more comprehensive view of uniqueness as a multidimensional construct. It demonstrates that duration is an important dimension of uniqueness, alongside its degree and that it has consequences for choices of unique products.

Notes

1. Indeed, a short pilot study with consumers ($n = 60$ women) revealed that 95% of the respondents had chosen between products that offered uniqueness for longer vs shorter time periods, at least once in the past.
2. Five participants did not respond to this question.

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- Dress-shirts (vs cross-body bags) similar to this one cost between US\$50 and US\$200 (vs US\$20 and US\$100). How much would you be willing to pay for this dress-shirt (vs bag)?
- How durable do you think is this dress-shirt (vs cross-body bag)? (*from 1= Not durable at all; to 7= Very much durable*)
- How classy do you think is this dress-shirt (vs cross-body bags)? (*from 1= Not classy at all; to 7= Very much classy*)

Pre-test: Phone case – pre-tested questions

- For how long do you think that the person who buys this phone case will feel unique? (*from 1= For a very short period of time; to 7= For a very long period of time*)
- To what extent do you think that the person who buys this phone case feels unique? (*from 1= Not unique at all; to 7= Very unique*)
- How much do you like this phone case? (*from 1= I do not like it at all; to 7= I like it very much*)
- For how long do you think that this phone case could be used before it starts to break down?
- How classy do you think is this phone case?

Appendix 2. Pilot field-study with luxury industry professionals – experiment conditions (lower pressure condition in parenthesis)

Some people enjoy being different from others. They like being original and do not feel uncomfortable for being perceived as “different”. These people just want to be unique.

Imagine that such a person enters your store to purchase a product (e.g. a dress-shirt, a bag or something else) to express his/her uniqueness. Specifically, this person is deciding between two high-status and unique products. One is classic or timeless and is expected to provide high status now and for the longer run. The other is in-fashion or trendy and is expected to provide high status while the fashion lasts, but less afterwards. This person needs to decide immediately (*vs now or later*) because these products will soon be unavailable. Which product do you think this person will choose?

Appendix 3. Stimuli study 2 – dress-shirt

Description and picture of product with short duration of uniqueness



This contemporary men's dress-shirt has become the latest fashion trend this season. Many men would like to have this shirt these days, as it can be worn in many occasions. Also, as printed fabrics are among the best choices this season, this shirt is the best option for the distinguished man. Anyone who wears it will stand out from his social circle during this season.

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Description and picture of product with long duration of uniqueness



This stylish dress-shirt is the all-time favorite shirt. Year after year, many men would like to have this shirt because they can wear it in many situations. Likewise, as printed fabrics have always been among the best choices, this shirt is the best option for the distinctive man. Any man wearing this dress-shirt will stand out from his social circle for many years to come.

Appendix 4. Stimuli study 3 – phone case

Description of phone case with short duration of uniqueness

This summer, your phone can look special! This phone case has a distinctive design. Its artistic look will make you unique for the next few weeks. Using this case will make your phone stand out for this summer!

Description of phone case with long duration of uniqueness

Your phone can look distinctive forever! This artistic phone case has a unique pattern. Its creative design will make you stand out for many years. This phone case can make your phone look special season after season!

Appendix 5. Stimuli studies 4 and 5 – cross-body bag

Description of cross-body bag with short duration of uniqueness

This ultimate fashion cross body bag is made from unique fabric. Its original floral pattern makes the bag trendy for the coming spring season. This chic model is only being offered in a few stores. Definitely, this is the choice of a woman who wants to express her individuality this spring.

Description of cross-body bag with long duration of uniqueness

This all-time stylish cross body bag is produced using distinctive material. Its unusual brownish lining makes it fashionable season after season. This classic item is only being offered at a few retailers. Nobody can doubt that this is the bag for a woman who continuously displays her uniqueness.

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