

#### IE UNIVERSIDAD

## TESIS DOCTORAL DOCTORAL DISSERTATION

### EXPLORANDO DIFERENTES DIMENSIONES DE LA ELECCIÓN Y EL CONSUMO CONSPICUO

### EXPLORING DIFFERENT DIMENSIONS OF CONSPICUOUS CHOICE AND CONSUMPTION

SUSAN DANISSA CALDERÓN URBINA

SEGOVIA, 2018



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#### ABSTRACT

Luxury retail sales have long surpassed multiple billion dollars per year, so that today, conspicuous consumption is an important matter for retail professionals across the world. This phenomenon has also spiked the interest of researchers who so far have mainly studied factors that influence the choice of conspicuous versus non-conspicuous products. In contrast, this dissertation addressees *how consumers* choose amongst conspicuous products, and what factors influence this decision and the consumption of conspicuous products.

This dissertation explores factors that affect the choice and consumption of products that are equally high in specific dimensions of conspicuous consumption. Essay 1 focuses on uniqueness, and studies the effect of the interplay between pressure and need for uniqueness (NFU) on how individuals choose between unique products that differ in their duration of uniqueness. It shows that higher pressure, in comparison to lower pressure, increases the tendency of high-NFU individuals to choose timeless over trendy products. Essay 2 focuses on status, and investigates when and how color-value influences perceptions of status, and choice of product. Findings show that individuals seeking status perceive higher status, and thus prefer lower color-value products over higher color-value ones, only when color-value is not salient during status evaluations. Essay 3 focuses on the hedonic dimension, and explores how product level influences motivation to consume products, depending on how products deliver their benefits. It demonstrates that motivation to consume products that deliver their benefits "upon finishing" increases while product level decreases. However, motivation to consume products that deliver their benefits "as you go" decreases while product level decreases.

Overall, the first two essays of this dissertation explore how individual or contextual factors influences the choice amongst conspicuous products *at the moment* of choice, while the third essay examines how product-related factors affect consumers *during consumption*.

#### RESUMEN

Las ventas de productos de lujo han superado los miles de millones de dólares por año, de modo que, actualmente, el consumo conspicuo es relevante para profesionales de todo el mundo. Este fenómeno también ha despertado el interés de investigadores que hasta ahora han estudiado los factores que influyen en la elección entre productos conspicuos versus no-conspicuos. Por el contrario, esta tesis estudia ¿cómo los consumidores eligen entre productos conspicuos, y qué factores influyen en esta decisión y en el consumo de productos conspicuos.

Esta tesis explora los factores que afectan la elección y el consumo de productos que son igualmente altos en dimensiones específicas del consumo conspicuo. El *Ensayo 1* se centra en la unicidad, y estudia el efecto de la interacción entre la presión y la necesidad de ser único (NFU) sobre cómo los individuos eligen productos únicos que se diferencian en la duración de la unicidad. Muestra que cuando los individuos tienen alta NFU y están bajo alta presión, en comparación a baja presión, tienden a elegir productos atemporales sobre los de moda. El *Ensayo 2* se centra en el estatus, e investiga cuándo y cómo las variaciones en el brillo del color influyen en las percepciones de estatus y la elección del producto. Los resultados muestran que las personas que buscan estatus perciben más estatus de productos con bajo brillo y por lo tanto prefieren estos productos, pero solo cuando esta característica del producto no sobresale durante las evaluaciones de estatus. El Ensayo 3 se centra en la dimensión hedónica, y explora cómo el nivel de producto influye en la motivación para consumir, dependiendo de cómo estos productos ofrecen sus beneficios. Demuestra que la motivación para consumir productos que ofrecen sus beneficios "al finalizar" aumenta a medida que disminuye el nivel de producto. Sin embargo, la motivación para consumir productos que entregan sus beneficios "sobre la marcha" disminuye a medida que disminuye el nivel de producto.

En general, los primeros dos ensayos de esta tesis exploran cómo los factores individuales o contextuales influyen en la elección entre productos conspicuos *en el momento* de la elección, mientras que el tercer ensayo examina cómo los factores relacionados con el producto afectan al consumidor *durante* el consumo.

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#### CHAPTER I

#### INTRODUCTION

In his *Theory of the Leisure Class*, Veblen (1899) defined conspicuous consumption as the purchase and display of products aiming at enhancing one's prestige. Ever since then, the study of conspicuous consumption has been a main interest for consumer behavior researchers. Nowadays, that the number of consumers purchasing luxury products has more than tripled over the last two decades, and that luxury retail sales are estimated to reach more than €295 billion at the end of 2020 (D'Arpizio & Levato, 2017), this interest continues to grow. Given the abundance of luxury products available in the market, and the willingness of consumers to purchase them, understanding what drives consumers to purchase luxury goods has been on the agenda of researchers and managers. Whereas previous research has mainly investigated the motivations for choosing to purchase and consume conspicuous versus non-conspicuous goods, this dissertation investigates *how do consumers choose amongst conspicuous products*, *and what factors affect their decision and the consumption of conspicuous products*?

Research in conspicuous consumption has differentiated products according to their degree of conspicuousness - from very low everyday non-conspicuous products, to the most conspicuous products of leading luxury brands such as Prada, and Gucci (Interbrand, 2017). Findings in this area suggest that individual characteristics such as desire for unique products (Lynn & Harris, 1997), Need for Status (Rucker, Dubois, & Galinsky, 2011), and materialistic desires (Richins & Dawson, 1992), as well as contextual factors, such as mating motives (Wang & Griskevicius, 2014), power

(Rucker & Galinsky, 2009), and social exclusion (Lee & Shrum, 2012), consistently affect the choice between conspicuous versus non-conspicuous products.

This dissertation offers a new, more detailed perspective by examining factors affecting the choice between highly conspicuous products, and their consumption. Extending the idea that conspicuous consumption involves multiple dimensions (Dubois & Duquesne, 1993), this research focuses on three dimensions: (1) uniqueness, (2) status and (3) hedonism.

Consequently, this dissertation consists of three essays, each dealing with one dimensions of conspicuous consumption. Essay 1 focuses on the uniqueness dimension of conspicuous products. Given the special features of luxury products, consumers know that these are not produced for the masses, independently of whether or not they purchase or consume them. Thus, luxury products are understood to be unique. This first essay shows how pressure and need for uniqueness, two relevant factors that are frequently present in uniqueness choice settings, affect the choice between unique products. Essay 2 focuses on the status dimension, a main reason to purchase luxury products (Dubois & Ordabayeva, 2015). This second essay demonstrates the process under which color-value (i.e., darkness) affects perceptions of status, and subsequently choice of product. Essay 3 focuses on the hedonic dimension of conspicuous consumption. Hedonic consumption, or the purchase of products for their enjoyment, is often associated with luxury products (Hagtvedt & Patrick, 2009). This third essay considers product level and how products deliver hedonic benefits, to study their influence in motivation to consume. To increase our knowledge about conspicuous products choice and consumption alike, the first two essays explore how individual or contextual factors influences consumers at the moment of choice. The last essay examines product-related factors that have an influence *during* consumption. Taken together, these three essays factors that affect the choice and consumption of products that are equally high in specific dimensions of conspicuous consumption. A detailed introduction to each essay follows before this chapter concludes with an outlook of the subsequent chapters.

## Essay 1: Timeless or trendy? The effect of pressure and need for uniqueness on the choice of unique products

Consumers seeking uniqueness by definition prefer unique (Lynn & Harris, 1997; Snyder & Fromkin, 1980) over common products. However, these consumers frequently choose between products that provide equal degrees of uniqueness, for either longer (timeless products), or shorter (trendy products) time. Moreover, unique products (either timeless or trendy) are often offered in limited quantity, or for a limited time (Cialdini, 2007; Lynn, 1991), putting consumers under some pressure at the moment of choice. This essay examines *how do pressure and need for uniqueness* (NFU) interact to affect the choice between timeless and trendy products?

Choices between options with similar levels of an attribute (e.g., uniqueness) are difficult, especially when this attribute is important for individuals (Bettman, Johnson, Luce, & Payne, 1993). In such cases, pressure (if not extreme; Baumeister, 1984) can be helpful to facilitate decisions by making individuals rely on specific information (Bronner, 1982; Wright, 1974), such as the differences between the options (Dhar & Nowlis, 1999). This essay shows that the interplay between pressure and NFU affects how individuals choose between unique products that differ in their duration of uniqueness.

A *pilot field-study* establishes the managerial relevance of this research. Luxury sales professionals could not predict our hypothesized pattern of choice, but recognized the importance of our investigation. *Study 1* shows that the interaction between pressure and NFU affects choice among unique products. For this study, a timeless and a trendy dress-shirts, were pre-tested so that the former was intentionally superior in several dimensions, including uniqueness duration. Still, in these settings that favor the timeless option, only high-NFU individuals, but not low-NFU individuals, under high (but not low) pressure, tend to choose timeless (instead of trendy) products. *Study 2* tests the interaction effect between Consumer's NFU and time-pressure (Briley & Aaker, 2006) in a consequential choice task. Results support and complement initial findings. *Study 3* establishes the theoretical mechanism that demonstrates that high, but not low NFU individuals focus more (vs. less) on the duration of uniqueness under high (vs. low) pressure, and thus tend to choose timeless (vs. trendy) products.

Overall, this research introduces 'uniqueness duration', suggesting that uniqueness is a multidimensional construct and its duration is an important dimension, alongside its degree (Lynn & Harris, 1997). This research further shows how two factors that co-exist in uniqueness consumption settings, pressure and NFU, jointly shape the choice of unique products. This interaction adds to seemingly inconsistent effects of pressure shown in previous research. Some studies suggest that pressure can lead to choking (Baumeister, 1984). Others, suggest that it can lead to more objective and better outcomes (Eisenberger & Aselage, 2009; Locke & Bryan, 1967; Scopelliti, Cillo, Busacca, & Mazursky, 2014). This research suggests that the positive (versus negative) effects of pressure might depend on the motivation of individuals (Baer & Oldham, 2006; Latham & Locke, 1975). For practitioners in the luxury industry,

these findings suggest using pressure carefully, since it can highlight the duration advantage of timeless products (boosting sales) but obscure the attributes of trendy products (hindering sales).

# Essay 2: The unspeakable dark side of status: Low color-value signals status, unless you mention it

Consumers often choose products to increase their status (Veblen, 1899), frequently through visual elements (O'Cass & Frost, 2002), such as size (Dubois, Rucker, & Galinsky, 2012), and special ornaments (Berry, 1994). A visual element with important symbolic connotations is color (Hoegg & Alba, 2006). Specifically, color-value – the degree of darkness (i.e., low-value) or lightness (i.e., high-value; Gorn, Chattopadhyay, Yi, & Dahl, 1997) of colors – impacts perceptions (Mahnke, 1996). Thus, given that visual elements in products signal status and that color-value is a visual element with strong signaling properties, this essay explores when and how does color-value influence perceptions of status?

The literature on perceptions induced by color suggests that low color-value (i.e. dark colors) increases perceptions of power (Amhorst & Reed, 1986; Labrecque, Patrick, & Milne, 2013; Valdez & Mehrabian, 1994). This could indicate that low color-value can increase perceptions of status too. However, the status signaling literature also posits that status indicators are valid and effective only if they are costly or difficult to obtain (Dubois & Ordabayeva, 2015; Nelissen & Meijers, 2011; Veblen, 1899). From this perspective, color-value can hardly be a status signal, since it is neither costly nor difficult to obtain. These two streams of research are reconciled by suggesting two important boundary conditions. First, color-value can influence perceptions of status,

but does so only for individuals seeking status. Individuals seeking status look for status signals (Han, Nunes, & Drèze, 2010) and thus will be more prone to infer status even from weak status signals, such as color-value. Second, color-value can influence perceptions of status only when it is not salient during status evaluations. When color-value is salient, individuals would discount it, as it is a weak status signal.

Study 1 shows that individuals seeking status prefer low color-value (i.e., dark) products over high color-value (i.e., light) ones. Study 2 provides convergent field evidence confirming previous findings, and establishing the relevance of our research for managers by showing that stores are not maximizing their offerings to satisfy consumer's status needs. Study 3 demonstrates that participants perceived higher status from low color-value products than from high color-value products. This study also shows that this relationship only holds if color-value is not salient during status evaluations. Study 4 tests the proposed full model and shows that the interaction between status seeking and saliency on choice of color-value product is mediated by perceptions of status. These results increase the generalizability of our predictions as in this study status seeking was not manipulated but replicated using a measure for chronic tendencies to purchase status products. Finally, Study 5 provides additional support for the hypothesis that the association between color-value and status holds when color-value is not salient, by manipulating participants' cognitive resources.

Overall, the current findings contribute to research on conspicuous consumption by reconciling two streams of research. This essay defines color-value as a non-costly and thus weak status signal (Connelly, Certo, Ireland, & Reuztzel, 2011; Nelissen & Meijers, 2011; Spence, 1973; Veblen, 1899), to propose that it still can signal status when individuals are seeking to increase their status, and when color-value is not salient during status evaluations. This essay also shows how and

when color-value can increase status and has relevant consequences for product choices. Managerially, these findings suggest how to use color-value as a visual element to increase status perceptions. In addition, this investigation suggests companies to avoid any salient communication of status-signaling properties, as it would attenuate perceptions of status.

## Essay 3: "Finishing up" or "holding out" until the last drop? Effects of product level on motivation to consume

Consumers buy products for the benefits that these products bring during consumption (Holbrook & Hirschman, 1982; Nowlis, Mandel, & McCabe, 2004; Wang, Novemsky, & Dhar, 2009). Whereas it is expected that consumers fully consume their purchased products, it is common to see that they do not always do so. Although they might still enjoy the product usage, their motivation to consume the product seems to decrease together with the amount of product left. This essay explores when and why people would be motivated to keep consuming a product or to conserve what is left, as product level decreases.

This essay proposes that whether consumers are motivated to consume or to conserve a product as product level decreases, depends on how the product delivers its benefits. Products that deliver their benefits "upon finishing" are those that provide the bulk of their benefits once consumers finish the product. Products that deliver their benefits "as you go" are those that provide their benefits with every use.

Building on research that distinguishes between goals and resources (Dhar & Simonson, 1999), this research proposes that individuals would be more likely to represent consumption of products that deliver their benefits "upon finishing" as

"serving a goal". Thus, motivation to consume should follow the trajectory of the goal-gradient hypothesis (Hull, 1932; Kivetz, Urminsky, & Zheng, 2006), and increase towards the end of the consumption process (i.e., when product level is low). Consumers will consider the contribution of each consumption occasion to the attainment of the full benefits of the product. However, individuals would be more likely to represent consumption of products that deliver their benefits "as you go" as "consuming a resource". Thus, motivation to consume would violate the goal-gradient hypothesis, and decrease towards the end of the consumption process. Consumers will consider the loss that each consumption occasion represents to the future attainment of the benefits of the product, and they will increase the desire to conserve resources.

Study 1 shows that motivation to consume products that deliver their benefits "upon finishing" increases while product level decreases. However, motivation to consume products that deliver their benefits "as you go" decreases while product level decreases. Study 2 replicates previous results using a different product, and provides initial tests for the mechanism behind the decrease in motivation to consume for products that deliver their benefits "as you go". It shows that for these products, participants express higher desire to conserve resources when the product was almost empty than when it was almost full. Then, higher desires to conserve resources resulted in a lower motivation to consume. Study 3 demonstrates that the increase in motivation to consume products that deliver their benefits "upon finishing" is due to an increase in perceptions of contribution of each consumption occasion to the attainment of benefits. However, the decrease in motivation to consume "as you go" products is due to an increase in desire for resource conservation.

Overall, this third essay contributes to research on post-purchase consumption. Whereas previous studies of consumption have investigated situations in which consumers are dissatisfied with the product benefits, (Richins & Bloch, 1991; Bolton & Lemon, 1999), this essay focuses on products that still provide value to consumers, but still motivation to consume declines. In addition, this essay contributes to research on antecedents of consumers' motivation. Previous research looked at the influence of various product (e.g., package size) as well as context related factors (e.g. stockpiling) on how much product an individual consumes (Ailawadi & Neslin, 1998; Chandon & Wansink, 2002; de Castro & Brewer, 1992; Wansink, 1996). This essay focuses on product level as an influence on motivation to consume.

This dissertation is organized as follows. Chapter II presents the conceptual development, empirical analyses, findings of a pilot study as well as three experimental studies, and a general discussion for Essay 1. Chapter III presents the conceptual development, empirical analyses, findings of a field study as well as four experimental studies, and a general discussion for Essay 2. Chapter IV presents the conceptual development, empirical analyses, findings of three experimental studies, and a general discussion for Essay 3. Chapter V, summarizes the empirical evidence across all three essays, identifies contributions, discusses limitations, and suggests directions for future research.

#### **CAPÍTULO I**

#### INTRODUCCIÓN

En su *Teoría de la Clase Ociosa*, Veblen (1899) definió el consumo conspicuo como la compra y exhibición de productos destinados a aumentar el prestigio. Desde entonces, el estudio del consumo conspicuo ha sido de gran interés para los investigadores del comportamiento del consumidor. Hoy en día, que el número de consumidores que compran productos de lujo se ha más que triplicado en las últimas dos décadas, y que se estima que las ventas minoristas de lujo superen los 295 mil millones de euros a finales de 2020 (D'Arpizio & Levato, 2017), este interés continúa creciendo. Dada la abundancia de productos de lujo disponibles en el mercado y la voluntad de los consumidores de comprarlos, comprender qué impulsa a los consumidores a comprar estos productos ha estado en la agenda de los investigadores y gerentes. Mientras que investigaciones previas han estudiado principalmente las motivaciones de compra y consumo de productos conspicuos versus no-conspicuos, esta tesis investiga ¿cómo los consumidores eligen entre productos conspicuos, y qué factores afectan esta decisión y el consumo de productos conspicuos?

Investigaciones sobre el consumo conspicuo han diferenciado los productos de acuerdo con su grado, desde productos más conspicuos de las principales marcas de lujo como Prada y Gucci (Interbrand, 2017) hasta los productos cotidianos noconspicuos. Los hallazgos en esta área sugieren que características individuales, como el deseo por productos únicos (Lynn & Harris, 1997), la necesidad de estatus (Rucker, Dubois & Galinsky, 2011) y los deseos materialistas (Richins & Dawson, 1992), así como factores contextuales, como la motivación para relacionarse (Wang

& Griskevicius, 2014), el poder (Rucker & Galinsky, 2009) y la exclusión social (Lee & Shrum, 2012), afectan de manera consistente la elección entre los productos conspicuos y los no-conspicuos.

Esta tesis ofrece una perspectiva nueva y más detallada al examinar los factores que afectan la elección entre, y el consumo de productos altamente conspicuos. Extendiendo la idea de que el consumo conspicuo involucra múltiples dimensiones (Dubois & Duquesne, 1993), esta investigación se enfoca en tres dimensiones: (1) unicidad, (2) estatus y (3) hedonismo.

En consecuencia, esta tesis consiste en tres ensayos, cada uno de los cuales aborda una de estas dimensiones del consumo conspicuo. El Ensayo 1 se centra en unicidad como dimensión consumo conspicuo. Dadas las características especiales de los productos de lujo, los consumidores saben que estos no se producen para las masas, independientemente de si los compran o los consumen o no. Por lo tanto, se entiende que los productos de lujo son únicos. Este primer ensayo muestra cómo la presión y la necesidad de ser único, dos factores frecuentemente presentes en este tipo de decisiones, afectan la elección entre productos únicos. El Ensayo 2 se centra en la dimensión de estatus, una razón principal para comprar productos de lujo (Dubois & Ordabayeva, 2015). Este segundo ensayo demuestra el proceso bajo el cual el brillo del color afecta las percepciones de estatus y, posteriormente, la elección del producto. El Ensayo 3 se centra en la dimensión hedónica del consumo conspicuo. El consumo hedónico, o la compra de productos para su disfrute, a menudo se asocia con productos de lujo (Hagtvedt & Patrick, 2009). Este tercer ensayo considera cómo el nivel de producto junto con cómo los productos ofrecen sus beneficios hedónicos, influyen en la motivación para consumir. Para aumentar nuestro conocimiento sobre la elección y el consumo conspicuo de productos, los primeros dos ensayos exploran cómo los factores individuales o contextuales influyen en los consumidores *en el momento* de la elección. El último ensayo examina los factores relacionados con el consumo que tienen una influencia *durante* el consumo. En conjunto, estos tres ensayos exploran factores individuales, contextuales, y aquellos relacionados con el producto, que afectan la elección y el consumo de productos que son igualmente altos en dimensiones específicas del consumo conspicuo. A continuación se presenta, una introducción detallada a cada ensayo antes de que este capítulo concluya con un panorama de los siguientes capítulos.

### Ensayo 1: Atemporal o de moda? El efecto de la presión y la necesidad de ser único en la elección de productos únicos

Los consumidores que buscan ser únicos por definición prefieren productos únicos sobre los productos comunes (Lynn & Harris, 1997; Snyder & Fromkin, 1980). Sin embargo, estos consumidores con frecuencia eligen entre productos que brindan el mismo grado de unicidad, ya sea por un largo (productos atemporales) o corto (productos de moda) tiempo. Además, los productos únicos (atemporales o de moda) a menudo se ofrecen en cantidades limitadas o por tiempo limitado (Cialdini, 2007; Lynn, 1991), lo que pone a los consumidores bajo presión en el momento de la elección. Este ensayo examina cómo la presión y la necesidad de ser único (NFU) interactúan para afectar la elección entre productos atemporales y modernos.

Las elecciones entre opciones con niveles similares de un atributo (por ejemplo, unicidad) son difíciles, especialmente cuando este atributo es importante para los individuos (Bettman, Johnson, Luce & Payne, 1993). En tales casos, la presión (si no es extrema, Baumeister, 1984) puede ser útil para facilitar las

decisiones al hacer que los individuos dependan de información específica (Bronner, 1982; Wright, 1974), como las diferencias entre las opciones (Dhar & Nowlis, 1999). Este ensayo muestra que la interacción entre la presión y NFU afecta cómo las personas eligen entre productos únicos que difieren en la duración de su unicidad.

Un Estudio de Campo Piloto establece la relevancia gerencial de esta investigación. Los profesionales de ventas de lujo no pudieron predecir nuestro patrón hipotético de elección, pero reconocieron la importancia de nuestra investigación. El estudio 1 muestra que la interacción entre la presión y NFU afecta la elección entre productos únicos. Para este estudio, se pre-testearon una camiseta atemporal y otra de moda, de modo que la primera fue intencionalmente superior en varias dimensiones, incluida la duración de la unicidad. Aún así, en estos entornos que favorecen la opción atemporal, solo los individuos de alta NFU, pero no los individuos de baja NFU, bajo alta presión (pero no baja), tienden a elegir productos atemporales (en lugar de los de moda). El Estudio 2 evalúa el efecto de interacción entre la presión en base al tiempo (Briley & Aaker, 2006) y la NFU del consumidor en una tarea de elección consecuente. Los resultados apoyan y complementan los hallazgos iniciales. El Estudio 3 establece el mecanismo teórico que demuestra que los individuos de alta NFU, pero no de baja, se enfocan más en la duración de la unicidad bajo alta (contra baja) presión, y por lo tanto tienden a elegir productos atemporales (frente a los de moda).

En general, esta investigación introduce la "duración de la unicidad", lo que sugiere que la unicidad es una construcción multidimensional y su duración es una dimensión importante, junto con el grado de unicidad (Lynn & Harris, 1997). Esta investigación muestra además cómo dos factores que co-existen en entornos de consumo de unicidad, presión y NFU, afectan conjuntamente la elección de productos

únicos. Esta interacción se suma a los efectos aparentemente inconsistentes de la presión mostrados en investigaciones previas. Algunos estudios sugieren que la presión puede llevar a consecuencias negativas (Baumeister, 1984). Otros sugieren que puede conducir a resultados más objetivos y mejores (Eisenberger & Aselage, 2009; Locke & Bryan, 1967; Scopelliti, Cillo, Busacca & Mazursky, 2014). Esta investigación sugiere que los efectos positivos (versus negativos) de la presión pueden depender de la motivación de los individuos (Baer & Oldham, 2006; Latham & Locke, 1975). Para los profesionales de la industria del lujo, estos hallazgos sugieren utilizar la presión con cuidado, ya que puede resaltar la ventaja en la duración de los productos atemporales (aumentar las ventas) pero oscurecer los atributos de los productos de moda (dificultando las ventas).

# Ensayo 2: El indescriptible lado oscuro del estatus: El bajo brillo del color indica estatus, a menos que lo menciones

Los consumidores a menudo eligen productos para aumentar su estatus (Veblen, 1899), frecuentemente a través de elementos visuales (O'Cass & Frost, 2002), como el tamaño del producto (Dubois, Rucker, & Galinsky, 2012) y los ornamentos especiales (Berry, 1994). Un elemento visual con importantes connotaciones simbólicas es el color (Hoegg & Alba, 2006). Específicamente, el brillo del color: el grado de oscuridad (es decir, de bajo brillo) o claridad (es decir, de alto brillo, Gorn, Chattopadhyay, Yi & Dahl, 1997) de los colores, impacta las percepciones (Mahnke, 1996). Por lo tanto, dado que los elementos visuales de los productos pueden indicar estatus y que el brillo del color es un elemento visual con fuertes

propiedades significativas, este ensayo explora *cuándo y cómo influye el brillo del color en las percepciones de estatus.* 

La literatura sobre las percepciones inducidas por el color sugiere que el bajo brillo del color (es decir, los colores oscuros) aumenta las percepciones de poder (Amhorst & Reed, 1986; Labrecque, Patrick & Milne, 2013; Valdez & Mehrabian, 1994). Esto podría indicar que el bajo brillo del color también puede aumentar las percepciones de estatus. Sin embargo, la literatura acerca de los signos de estatus también postula que los indicadores de estatus son válidos y efectivos solo si son costosos o difíciles de obtener (Dubois & Ordabayeva, 2015; Nelissen & Meijers, 2011; Veblen, 1899). Desde esta perspectiva, el brillo del color difícilmente puede ser un indicador de estatus, ya que no es costoso ni difícil de obtener. Estas dos corrientes de investigación son reconciliadas al sugerir dos condiciones. En primer lugar, el brillo del color puede influir en las percepciones de estatus, pero solo para las personas que buscan estatus. Los individuos que buscan estatus buscan indicadores de estatus (Han, Nunes & Drèze, 2010) y, por lo tanto, serán más propensos a inferir estatus incluso de indicadores débiles de estatus, como el brillo del color. En segundo lugar, el brillo del color puede influir en las percepciones de estatus solo cuando esta característica sobresale durante las evaluaciones de estatus. Cuando el brillo del color es sobresaliente, los individuos lo descuentan durante las evaluaciones de estatus, ya que es un indicador débil de estatus.

El Estudio 1 muestra que los individuos que buscan estatus prefieren productos de bajo brillo (es decir, oscuros) sobre los de alto brillo (es decir, claros). El Estudio 2 proporciona evidencia de campo que confirma los hallazgos previos y establece la relevancia de nuestra investigación en el ámbito gerencial al mostrar que las tiendas no están maximizando sus ofertas para satisfacer las necesidades de estatus del

consumidor. El *Estudio 3* demuestra que los participantes percibieron más estatus de productos de bajo brillo que de los de alto brillo. Este estudio también muestra que esta relación solo se cumple si el brillo del color no es sobresaliente durante las evaluaciones de estatus. El *Estudio 4* prueba el modelo teórico completo y muestra que el efecto de la interacción entre la búsqueda de estatus y la saliencia de esta característica, sobre la elección de producto, está mediada por las percepciones de estatus. Estos resultados aumentan la capacidad de generalización de nuestras predicciones, ya que, en este estudio, la búsqueda de estatus no se manipuló, sino que se replicó utilizando una medida de tendencias crónicas para adquirir productos de estatus. Finalmente, el *Estudio 5* proporciona soporte adicional para la establecer la asociación entre el brillo del color y el estatus cuando el brillo del color no es sobresaliente, mediante la manipulación de los recursos cognitivos de los participantes.

En general, los hallazgos actuales contribuyen a la investigación sobre el consumo conspicuo al conciliar dos corrientes de investigación. Este ensayo define el brillo del color como un indicador de estatus no costosa y por lo tanto débil (Connelly, Certo, Irlanda, & Reuztzel, 2011; Nelissen & Meijers, 2011; Spence, 1973; Veblen, 1899), para proponer que aún así puede indicar estatus cuando las personas buscan aumentar su estatus, y cuando el brillo del color no es sobresaliente durante las evaluaciones de estatus. Este ensayo también muestra cómo y cuándo el brillo del color puede impulsar el estatus y tiene consecuencias relevantes para la elección de producto. Gerencialmente, estos hallazgos sugieren cómo usar el brillo del color como un elemento visual para influenciar las percepciones de estatus. Sin embargo, esta investigación sugiere que las empresas eviten cualquier comunicación que destaque los elementos que indiquen estatus, ya que atenuarían las percepciones de estatus.

# Ensayo 3: "Terminar" o "aferrarse" hasta la última gota? Efectos del nivel de producto en la motivación para consumir

Los consumidores compran productos por los beneficios que estos aportan durante el consumo (Holbrook & Hirschman, 1982; Nowlis, Mandel & McCabe, 2004; Wang, Novemsky & Dhar, 2009). Mientras se espera que los consumidores consuman completamente los productos que compran, es común ver que no siempre lo hacen. A pesar de que todavía se disfrute del uso del producto, la motivación para consumir parece disminuir junto con la cantidad de producto. Este ensayo explora *cuándo y por qué las personas estarían motivadas para seguir consumiendo un producto o para conservarlo, mientras que el nivel de producto disminuye.* 

Este ensayo propone que los consumidores estarían motivados para consumir o conservar un producto a medida que disminuye el nivel de producto, dependiendo de cómo el producto ofrece sus beneficios. Los productos que ofrecen sus beneficios "al finalizar" son aquellos que brindan la mayor parte de sus beneficios al terminar el producto. Los productos que entregan sus beneficios "sobre la marcha" son aquellos que brindan sus beneficios con cada uso.

Sobre la base de investigaciones que distinguen entre objetivos y recursos (Dhar & Simonson, 1999), esta investigación propone que los individuos serían más propensos a representar el consumo de productos que entregan sus beneficios "al finalizar" como "al servicio de un objetivo". Por lo tanto, la motivación para consumir debería seguir la trayectoria de la hipótesis del gradiente objetivo (Hull, 1932; Kivetz, Urminsky & Zheng, 2006) y aumentar hacia el final del proceso de consumo (es decir, cuando el nivel de producto es bajo). Los consumidores considerarán la contribución

de cada ocasión de consumo al logro de los beneficios del producto. Sin embargo, las personas tendrían más probabilidades de representar el consumo de productos que entregan sus beneficios "sobre la marcha" como "consumir un recurso". Por lo tanto, la motivación para consumir violaría la hipótesis del gradiente objetivo y disminuiría hacia el final del proceso de consumo. Los consumidores considerarán la pérdida que cada ocasión de consumo representa para el logro futuro de los beneficios del producto, y aumentará el deseo de conservar recursos.

El *Estudio 1* muestra que la motivación para consumir productos que entregan sus beneficios "al finalizar" aumenta a medida que disminuye el nivel de producto. Sin embargo, la motivación para consumir productos que entregan sus beneficios "sobre la marcha" disminuye a medida que disminuye el nivel de producto. El Estudio 2 replica los resultados previos con un producto diferente y proporciona pruebas iniciales del mecanismo que subyace a la disminución de la motivación para consumir productos que ofrecen sus beneficios "sobre la marcha". Este estudio muestra que para estos productos, los participantes expresan un mayor deseo de conservar recursos cuando el producto estaba casi vacío que cuando estaba casi lleno. Entonces, mayores deseos de conservar recursos dieron como resultado una menor motivación para consumir. El Estudio 3 demuestra que el aumento en la motivación para consumir productos que entregan sus beneficios "al finalizar" se debe a un aumento en las percepciones de la contribución de cada ocasión de consumo a la obtención de beneficios. Sin embargo, la disminución de la motivación para consumir productos "sobre la marcha" se debe a un aumento en el deseo de conservar recursos.

En general, este tercer ensayo contribuye a la investigación sobre el consumo posterior a la compra. Mientras que estudios previos de consumo han investigado

situaciones en las que los consumidores no están satisfechos con los beneficios del producto (Richins & Bloch, 1991; Bolton & Lemon, 1999), este ensayo se centra en productos que aún proporcionan valor a los consumidores, pero aún así la motivación para consumir disminuye. Además, contribuimos a la investigación sobre los antecedentes de la motivación de los consumidores. Investigaciones anteriores analizaron la influencia de varios factores relacionados al producto (por ejemplo, el tamaño del producto) y al contexto (por ejemplo, el almacenamiento) sobre la cantidad de producto que consume un individuo (Ailawadi & Neslin, 1998; Chandon & Wansink, 2002; de Castro & Brewer, 1992; Wansink, 1996). Este ensayo se centra en el nivel de producto como una influencia en la motivación para consumir.

Esta tesis está organizada de la siguiente manera. El Capítulo II presenta el desarrollo conceptual, análisis empíricos, los hallazgos de un estudio piloto, así como tres estudios experimentales, y una discusión general para el Ensayo 1. El Capítulo III presenta el desarrollo conceptual, análisis empíricos y los hallazgos de un estudio de campo, así como cuatro estudios experimentales, y una discusión general para el Ensayo 2. El Capítulo IV presenta el desarrollo conceptual, análisis empírico, así como los hallazgos de tres estudios experimentales, y una discusión general para el Ensayo 3. El Capítulo V resume la evidencia empírica de los tres ensayos, identifica las contribuciones, discute las limitaciones y sugiere direcciones para futuras investigación.

#### REFERENCES

- Ailawadi, K. L., & Neslin, S. A. (1998). The effect of promotion on consumption: Buying more and consuming it faster. *Journal of Marketing Research*, 390-398.
- Amhorst, M. L. D., & Reed, J. (1986). Clothing color value and facial expression:

  Effects on evaluations of female job applicants. Social Behavior and

  Personality: An International Journal, 14(1), 89-98.
- Baer, M., & Oldham, G. R. (2006). The curvilinear relation between experienced creative time pressure and creativity: moderating effects of openness to experience and support for creativity. *Journal of Applied Psychology*, *91*(4), 963.
- Baumeister, R. F. (1984). Choking under pressure: Self-consciousness and paradoxical effects of incentives on skillful performance. *Journal of Personality and Social Psychology*, *46*(3), 610-620.
- Berry, C. J. (1994). *The idea of luxury: A conceptual and historical investigation* (Vol. 30): Cambridge University Press.
- Bettman, J. R., Johnson, E. J., Luce, M. F., & Payne, J. W. (1993). Correlation, conflict, and choice. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 19(4), 931.
- Bolton, R. N., & Lemon, K. N. (1999). A dynamic model of customers' usage of services: usage as an antecedent and consequence of satisfaction. *Journal of Marketing Research*, 171-186.

- Briley, D. A., & Aaker, J. L. (2006). When does culture matter? Effects of personal knowledge on the correction of culture-based judgments. *Journal of Marketing Research*, 43(3), 395-408.
- Bronner, R. (1982). Decision making under time pressure. Lexington, MA: DC Heath.
- Chandon, P., & Wansink, B. (2002). When Are Stockpiled Products Consumed Faster? A Convenience–Salience Framework of Postpurchase Consumption Incidence and Quantity. *Journal of Marketing Research*, 39(3), 321-335.
- Cialdini, R. B. (2007). *Influence : the psychology of persuasion* (Rev. ed. ed.). New York : HarperCollins.
- Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. (2011). Signaling theory:

  A review and assessment. *Journal of Management*, *37*(1), 39-67.
- D'Arpizio, C., & Levato, F. (2017). Worldwide Luxury Market Monitor 2017, Spring
  Update. From https://altagamma.it/media/source/170529%20Bain%20Luxury
  %20Study%20Sp ring %20Update%20-%20SENT.pdf
- de Castro, J. M., & Brewer, E. M. (1992). The amount eaten in meals by humans is a power function of the number of people present. *Physiology & Behavior, 51*(1), 121-125.
- Dhar, R., & Nowlis, S. M. (1999). The Effect of Time Pressure on Consumer Choice

  Deferral. *Journal of Consumer Research*, 25(4), 369-384.
- Dubois, & Ordabayeva, N. (2015). Social Hierarchy, Social Status, and Status Consumption. In M. Norton, D. Rucker & C. Lamberton (Eds.), *The Cambridge Handbook of Consumer Psychology*.

- Dubois, B., & Duquesne, P. (1993). The market for luxury goods: Income versus culture. *European Journal of Marketing*, *27*(1), 35-44.
- Dubois, D., Rucker, D. D., & Galinsky, A. D. (2012). Super size me: product size as a signal of status. *Journal of Consumer Research*, 38(6), 1047-1062.
- Eisenberger, R., & Aselage, J. (2009). Incremental effects of reward on experienced performance pressure: Positive outcomes for intrinsic interest and creativity. *Journal of Organizational Behavior*, 95-117.
- Gorn, G. J., Chattopadhyay, A., Yi, T., & Dahl, D. W. (1997). Effects of color as an executional cue in advertising: They're in the shade. *Management science*, *43*(10), 1387-1400.
- Hagtvedt, H., & Patrick, V. M. (2009). The broad embrace of luxury: Hedonic potential as a driver of brand extendibility.
- Han, Y. J., Nunes, J. C., & Drèze, X. (2010). Signaling status with luxury goods: the role of brand prominence. *Journal of Marketing*, *74*(4), 15-30.
- Hoegg, J., & Alba, J. W. (2006). Taste perception: more than meets the tongue. *Journal of Consumer Research*, 33(4), 490-498.
- Holbrook, M. B., & Hirschman, E. C. (1982). The experiential aspects of consumption: consumer fantasies, feelings, and fun. *Journal of Consumer Research*, 132-140.
- Hull, C. L. (1932). The goal-gradient hypothesis and maze learning. *Psychological Review*, *39*(1), 25.
- Interbrand (2017), "Interbrand Best Global Brands 2017 Ranking." Retrieved on

- September 05, 2018 https://www.interbrand.com/best-brands/best-global-brands/2017/ranking/
- Kivetz, R., Urminsky, O., & Zheng, Y. (2006). The goal-gradient hypothesis resurrected: Purchase acceleration, illusionary goal progress, and customer retention. *Journal of Marketing Research*, *43*(1), 39-58.
- Labrecque, L. I., Patrick, V. M., & Milne, G. R. (2013). The marketers' prismatic palette:

  A review of color research and future directions. *Psychology & Marketing*, *30*(2), 187-202.
- Latham, G. P., & Locke, E. A. (1975). Increasing productivity and decreasing time limits: A field replication of Parkinson's law. *Journal of Applied Psychology,* 60(4), 524.
- Lee, J., & Shrum, L. J. (2012). Conspicuous Consumption versus Charitable Behavior in Response to Social Exclusion: A Differential Needs Explanation. *Journal of Consumer Research*, 39(3), 530-544.
- Locke, E. A., & Bryan, J. F. (1967). Performance goals as determinants of level of performance and boredom. *Journal of Applied Psychology*, *51*(2), 120.
- Lynn, M. (1991). Scarcity effects on value: A quantitative review of the commodity theory literature. *Psychology & Marketing, 8*(1), 43-57.
- Lynn, M., & Harris, J. (1997). The desire for unique consumer products: A new individual differences scale. *Psychology and Marketing*, *14*(6), 601-616.

- Mahnke, F. H. (1996). Color, environment, and human response: an interdisciplinary understanding of color and its use as a beneficial element in the design of the architectural environment. John Wiley & Sons.
- Nelissen, R. M. A., & Meijers, M. H. C. (2011). Social benefits of luxury brands as costly signals of wealth and status. *Evolution and Human Behavior*, *32*(5), 343-355.
- Nowlis, S. M., Mandel, N., & McCabe, D. B. (2004). The Effect of a Delay between Choice and Consumption on Consumption Enjoyment. *Journal of Consumer Research*, 31(3), 502-510.
- O'Cass, A., & Frost, H. (2002). Status brands: Examining the effects of non-product-related brand associations on status and conspicuous consumption. *Journal of Product and Brand Management*, 11(2/3), 67.
- Richins, M. L., & Dawson, S. (1992). A consumer values orientation for materialism and its measurement: Scale development and validation. *Journal of consumer research*, *19*(3), 303.
- Rucker, D. D., Dubois, D., & Galinsky, A. D. (2011). Generous paupers and stingy princes: power drives consumer spending on self versus others. *Journal of Consumer Research*, 37(6), 1015-1029.
- Rucker, D. D., & Galinsky, A. D. (2009). Conspicuous consumption versus utilitarian ideals: How different levels of power shape consumer behavior. *Journal of Experimental Social Psychology*, *45*(3), 549-555.

- Scopelliti, I., Cillo, P., Busacca, B., & Mazursky, D. (2014). How do financial constraints affect creativity? *Journal of Product Innovation Management*, *31*(5), 880-893.
- Snyder, C. R., & Fromkin, H. L. (1980). *Uniqueness: The human pursuit of difference*: Plenum Press New York.
- Spence, M. (1973). Job market signaling. *The Quarterly Journal of Economics*, 87(3), 355-374.
- Valdez, P., & Mehrabian, A. (1994). Effects of color on emotions. *Journal of Experimental Psychology: General*, 123(4), 394.
- Veblen, T. (1899). The theory of the leisure class. New York: The New American Library.
- Wang, J., Novemsky, N., & Dhar, R. (2009). Anticipating Adaptation to Products. *Journal of Consumer Research*, 36(2), 149-159.
- Wansink, B., & Ray, M. L. (1996). Advertising strategies to increase usage frequency. *Journal of Marketing*, 31-46.
- Wright, P. (1974). The harassed decision maker: Time pressures, distractions, and the use of evidence. *Journal of Applied Psychology*, *59*(5), 555.

#### CHAPTER II

# TRENDY OR TIMELESS? THE EFFECT OF PRESSURE AND NEED FOR UNIQUENESS ON THE CHOICE OF UNIQUE PRODUCTS

Imagine a retailer is having a promotion for bags that are almost out of stock. A customer is choosing between two of those bags, both of which will help her show her uniqueness. This consumer wants to show how unique she is—that is, she has a high need for uniqueness (NFU)—through her choice of bag. One bag will offer uniqueness for many years (i.e., a timeless bag), while the other one will offer uniqueness only for a season and then it will likely be out of fashion (i.e., a trendy bag). This customer knows that she must hurry, as these bags are almost out of stock. So, she is under pressure. Would this pressure affect the choice of the consumer in question? If so, how?

Retailers of unique products often use pressure to influence shoppers' decisions (Cialdini, 2008), making them feel a sense of urgency to buy (Dhar & Nowlis, 1999). For instance, they use pressure-based messages that emphasize limited purchase time (e.g., "24-hours only") or product quantity (e.g., "only a few left"; Cialdini, 2007; Lynn, 1991; Snyder, 1992). Thus, choices between unique products are frequently made under pressure (Lynn & Harris, 1997a). Although pressure and NFU frequently co-exist and affect choices of unique products, research has not examined yet how they interact to affect choices between products that offer uniqueness for different durations of time. This is the focus of our research.

We build on previous research on pressure (Dhar, Nowlis, & Sherman, 2000; Maule, Hockey, & Bdzola, 2000; Suri, Monroe, & Koc, 2013) and need for uniqueness (Snyder & Fromkin, 1980; Tian, Bearden, & Hunter, 2001), to examine how these two

factors interact to affect choices between products that offer uniqueness for different durations. We label products that offer uniqueness for a longer time (Sproles, 1981) as "timeless products" and products that offer uniqueness for a shorter time (Pesendorfer, 1995) as "trendy products". We report three studies utilizing three forms of pressure: Time availability, psychological time pressure, and product availability. We predict and find that higher pressure, in comparison to lower pressure, increases the tendency of high-NFU individuals to choose timeless over trendy products. We also demonstrate the underlying process: Higher pressure increases the extent to which individuals high in NFU focus on duration of uniqueness, the differentiating factor between timeless and trendy products.

These studies make two important contributions to theory. First, despite their frequent co-occurrence in consumption settings, pressure (e.g., Ben Zur & Breznitz, 1980; Dhar & Nowlis, 1999), and NFU (Chan, Berger, & Van Boven, 2012; Simonson & Nowlis, 2000) have been investigated mostly independently from each other. Our research brings together these two research streams and shows how pressure and NFU interact, affecting the choices of shoppers. In doing so, it demonstrates that the effects of pressure may depend on chronic or situationally activated motivations (i.e., NFU) that are specific to the choice at hand (i.e., choices between unique products). In the present research, we show that pressure influences choices of high-NFU individuals, but not choices of low-NFU individuals.

Second, prior literature on NFU has shown important effects regarding preferences for products that offer more versus less uniqueness (Brock, 1968; Lynn, 1991; Snyder & Fromkin, 1980). Complementing this work, we focus on choices between products that offer similar levels of uniqueness, but for different durations. To the best of our knowledge, this is the first research examining choices between two

equally unique products that differ on the duration of uniqueness. This way, our research introduces duration of uniqueness as an important dimension of unique products, and thus adds to the understanding and development of uniqueness as a multidimensional construct.

Our findings also have important tangible implications for retailers selling unique products, a sector estimated to reach more than €295 billion in sales by the end of 2020 (D'Arpizio et. al. 2017). Retailers can directly manage pressure (Inman, McAlister, & Hoyer, 1990), and this pressure can influence consumer decision making (e.g., Ge, Messinger, & Li, 2009; Emmelhainz, Stock, & Emmelhainz 1991). Therefore, understanding how to use pressure-based marketing messages is relevant for retailers—as also indicated by a pilot-study we report later. Along these lines, we describe how to optimally use pressure, depending on whether managers want to favor the sales of timeless or trendy unique products.

The remainder of this article starts with developing the theory leading to our predictions. Next, we present a pilot field-study showing that the insights of this research are novel and relevant for retailers. We then discuss three experiments showing that pressure and NFU interact to affect the choice of timeless versus trendy products, and that the information that individuals process mediates these choices. Finally, we discuss the theoretical and managerial implications of our work.

#### CONCEPTUAL BACKGROUND

# **Pressure and its effects**

Pressure is a subjective psychological state in which individuals feel a *sense of increased urgency* (Dhar & Nowlis, 1999). This sense of urgency can appear for different reasons. For instance, retailers often emphasize in their messages limitations in time (Andrews & Farris, 1972; Ariely & Wertenbroch, 2002; Baer & Oldham, 2006; Ben Zur & Breznitz, 1981; Dhar and Nowlis, 1999; Iyer, 1989; Thompson, Gooner & Kim, 2015; Latham & Locke, 1975), and in product quantity, (Kristofferson, McFerran, Morales, & Dahl, 2016; Roux, Goldsmith, & Bonezzi, 2015). Both limitations can urge customers to buy.

Extensive research suggests that pressure can have important effects on how individuals process information (Dhar, Nowlis, & Sherman, 2000; Maule, Hockey, & Bdzola, 2000; Suri, Monroe, & Koc, 2013) and make decisions (Ben Zur & Breznitz, 1981; Dhar & Nowlis, 1999), as shown in *Table 1*. Some research suggests that individuals under pressure can simplify decisions by putting less effort (Svenson, Edland, & Slovic, 1990; Iyer, 1989; Lin, Sun, Chuang, & Su, 2008) or even choke in cases of extreme pressure (Baumeister, 1984). Other research finds that individuals under higher pressure narrow down processing (Suri, Kohli, & Monroe, 2007) by filtering (Maule, Hockey, & Bdzola, 2000) and evaluating specific information (Payne, Bettman & Johnson, 1991). Thus, when deciding under higher pressure, individuals focus on attributes that are relevant for the decision (Bronner, 1982; Maule & Svenson, 1993) and use salient differences between options as a decision rule (Dhar & Nowlis, 1999). On the other hand, individuals under lower pressure search for more information (Iyer, 1989), and evaluate more aspects of the decision task (Ben Zur, & Breznitz, 1980; Wright, 1974).

# [INSERT TABLE 1 HERE]

Retailers often use pressure-based messages (Lynn & Harris, 1997b) and effects of pressure can depend on the consumers' level of need for uniqueness (Cialdini, 2007; Lynn, 1991; Snyder, 1992). Thus, we discuss NFU next.

# Need for uniqueness and its effects

Need for uniqueness is the chronic (Snyder, 1992; Snyder & Fromkin, 1980; Tian et al., 2001; Tian & McKenzie, 2001) or contextually activated (Maimaran & Wheeler, 2008; Snyder & Fromkin, 1980) need to be different from others (Snyder, 1977). Shoppers can have low or high-NFU, and these differences in degree of NFU influence behavior and choices as shown in *Table 2*. For high-NFU (but not for low-NFU) individuals, the choice of unique products is important as these individuals continuously seek to build and maintain uniqueness through product choices (Lynn & Snyder, 2002; Snyder, 1992; Snyder & Fromkin, 1980). These shoppers are interested in acquiring products with high degrees of uniqueness, such as scarce (Snyder & Fromkin, 1980), innovative, and customized products (Lynn & Harris, 1997a; Lynn & Harris, 1997b; Snyder & Fromkin, 1980; Tian et al., 2001; Tian & McKenzie, 2001; Zheng Zhou & Nakamoto, 2007). However, shoppers who want to project their uniqueness can often choose not between a more unique and a less unique product, but between equally unique products that differ in *duration of uniqueness*.

# [INSERT TABLE 2 HERE]

Duration of uniqueness refers to the future period of time that unique products are expected to deliver uniqueness for and is independent from the product's objective durability (e.g., durable materials). Unique products can offer uniqueness for different durations (Pesendorfer, 1995; Sproles, 1981). Some can offer uniqueness across fashion cycles, for a long time in the future (Sproles, 1981): A bag with an iconic classic design that will help to project uniqueness for years. We refer to these products as "timeless". Other products can offer uniqueness during a specific fashion cycle, for a short period of time (Berger & Le Mens, 2009; Nunes, Drèze, Cillo, Prandelli, & Scopelliti, 2012; Pesendorfer, 1995): A bag with the most fashionable design of the season that will likely be outdated next season, and thus will help to project uniqueness for a short time. We refer to these products as "trendy."

Shoppers high in NFU contemplate the duration of uniqueness of a product. They think about how to maintain their uniqueness or how soon a product might not be unique anymore (Heckert, 1989; Ruvio, 2008). These shoppers want products that others do not have and lose interest for these products once they become outdated (Burns & Krampf, 1992; Fromkin, 1970; Snyder & Fromkin, 1980), even if these products are in good condition. Thus, duration of uniqueness is important for shoppers high in NFU.

# Joint effects of pressure and NFU on choices of unique product

Research suggests that when deciding under pressure, motivated individuals tend to focus on and compare relevant attributes (Andrews & Farris, 1972; Ariely & Wertenbroch, 2002; Baer & Oldham, 2006; Latham & Locke, 1975; Suri, Kohli, & Monroe, 2007). Unmotivated individuals may not do the same, as the decision is

unimportant to them. Thus, in our context, pressure is expected to affect only shoppers who are motivated to choose between unique products (Tian, et al., 2001). Those are shoppers high, but not low, in NFU.

Pressure makes motivated individuals place more emphasis on comparing relevant attributes (Bronner, 1982; Maule & Svenson, 1993) and salient differences between options (Dhar & Nowlis, 1999). Thus, higher pressure, in comparison to lower pressure, may drive the focus of high-NFU shoppers choosing between timeless and trendy products to duration of uniqueness—a relevant and differentiating characteristic of these products (Pesendorfer, 1995; Sproles, 1981). Thus, higher pressure, in comparison to lower pressure, will increase the tendency of high-NFU individuals to choose timeless products more, because they offer uniqueness for a longer time.

Under lower pressure, however, individuals may consider more types of information (Iyer, 1989) and compare more aspects of the decision (Bettman, Johnson, Luce & Payne, 1993). Individuals may even perceive new differences when directly comparing options at the moment of choice (Epley & Gilovich, 2006). In our setting, duration of uniqueness would therefore be only one of the factors that influence the decision of high-NFU shoppers under lower pressure. Degree of uniqueness may be another one. Although products that differ in duration of uniqueness may still offer the same degree of uniqueness (something we control for through pre-testing), when directly contrasted to timeless products (Epley & Gilovich, 2006) trendy products could be perceived as being more unique, novel (Thompson & Haytko, 1997; Tian et al., 2001), and distinct (Simmel, 1957) than timeless ones. These perceptions might occur because trendy products are in-fashion (Pesendorfer, 1995). When high-NFU individuals consider the differences in both duration of uniqueness and degree of uniqueness (created by the direct comparison of the two

products; Epley & Gilovich, 2006), differences in duration may be less impactful. As a consequence, lower pressure, in comparison to higher pressure may cause high-NFU individuals to focus less on the duration of uniqueness. Consequently, they will tend to choose relatively more trendy products.

As unique choices, and by extension the duration of uniqueness, are unimportant to low-NFU individuals (Gentina, Shrum, & Lowrey, 2016; Snyder & Fromkin, 1980), pressure is not expected to affect their choice of unique products.

Formally, we hypothesize (summarized in *Figure 1*):

**H1**: Pressure and NFU interact to affect the choice between timeless and trendy products. Higher pressure, in comparison to lower pressure, will increase the tendency of high-NFU, but not low-NFU, individuals to choose timeless over trendy products

**H2:** Changes in the focus of evaluation mediate this interaction. Under higher pressure, in comparison to lower pressure, high-NFU individuals will focus more on the duration of uniqueness and tend to choose relatively more timeless over trendy products.

[INSERT FIGURE 1 HERE]

# **OVERVIEW OF STUDIES**

We aim to understand how the interaction between pressure and NFU—two factors usually present in unique product choices—affects the choice between unique products that differ in duration of uniqueness. In this vein, we first carried out a pilot field-study that established the novelty and relevance of our hypotheses for retail

professionals with experience in unique products. Study 1 tested H1: Whether higher pressure, in comparison to lower pressure, would increase the tendency of high-NFU, but not low-NFU, individuals to choose timeless over trendy products. We manipulated pressure via time availability and measured chronic NFU (Snyder, 1977). Study 2 tested H1 with a consequential choice task, a different manipulation of pressure (i.e., psychological time pressure), and a different measure of NFU – Consumers Need for Uniqueness (Tian et al., 2001). Finally, Study 3 tested the process proposed in H2: Whether under higher pressure, in comparison to lower pressure, high-NFU individuals would focus more on the duration of uniqueness and whether this focus increases the tendency to choose the timeless (vs. trendy) product. In this study, we manipulated pressure via product availability and NFU through an established priming task (Maimaran & Wheeler, 2008). We also recorded participants' thoughts while deciding, in order to test the mediating process. Across all studies, the products used in the choice tasks were pre-tested to ascertain that duration of uniqueness varied as intended, but other related dimensions (e.g., degree of uniqueness) did not. These pre-tests are detailed in *Appendix 1*.

# PILOT FIELD-STUDY: MANAGERIAL NOVELTY AND RELEVANCE

This pilot study tested whether H1 is relevant and novel for unique products retail professionals. In addition, this study tested if retail professionals consider timeless products a better investment for consumers of unique products compared to trendy products.

Method

Participants. Thirty-one retail sales professionals (67.7% women,  $M_{age} = 32.10$ ) from retail stores like Dior, Versace, and Prada that sell both timeless and trendy unique products, participated in a single-factor (higher vs. lower pressure) between subjects experiment.

Procedure. Professionals were approached at work during low-traffic shopping hours. They completed a five-minute questionnaire about a hypothetical high-NFU consumer in their store, choosing between a timeless and a trendy product. For half of the participants, this consumer had to decide *now*, so he/she was under higher pressure. For the other half, the consumer had to decide *now or later*, so he/she was under lower pressure (*Appendix 2*). After reading the assigned situation, professionals predicted the consumer's choices (timeless, trendy, don't know), rated how useful this prediction was for their business (seven-point scale), indicated which product they thought was a better investment for the consumer (timeless, trendy, equal), and provided background information (e.g., experience, gender). All questionnaires were completed uninterruptedly at participants' own pace.

# Results and discussion

Retail professionals thought that timeless products were better investments (timeless = 67.7%; trendy = 25.8%; equal = 6.5%;  $\chi^2(2)$  = 18.26, p < .001) for consumers high in NFU. They also thought that being able to predict such choices would be useful for their business (M = 5.50 > 4-mid-point-, SD = 1.53; t(25) = 5.00, p < .001).

More importantly, their choice predictions were not the same as the ones implied by our hypotheses. Specifically, predicted choice shares of retail professionals

did not differ between the higher- and lower-pressure conditions (higher-pressure: Timeless = 33.3%, trendy = 53.3%, don't know = 13.3%; lower-pressure: Timeless = 50.0%, trendy = 37.5%, don't know = 12.5%; p > .62), even when controlling for experience ( $M_{experience}$  = 8.40 years), and gender. These results were not statistically significant and were even directionally opposite to our predictions. Thus, overall, our predictions seem to be novel and useful to specialized retail professionals of unique products. Next, we proceeded to test our hypotheses.

# STUDY 1: DOES PRESSURE AND NEED FOR UNIQUENESS INTERACT TO AFFECT CHOICE? TEST WITH A SUPERIOR TIMELESS PRODUCT

This study tested the interaction between pressure and chronic NFU (Snyder, 1977) on the choice between timeless and trendy products (H1). Specifically, in this study we asked participants to choose between two products that differ in their duration of uniqueness: Timeless vs. trendy. The timeless product was pre-tested to provide longer duration of uniqueness, being consequently a better option for high-NFU individuals, who aim to maintain their uniqueness over time (Ruvio, 2008). In addition, for this study only, the timeless product was purposely pre-tested to also be better in other relevant dimensions. One would expect that in these conditions, pressure should not make a difference in the choices of high-NFU individuals as they should tend to choose the timeless product under both high and low pressure. Therefore, this study provided a conservative test of whether under higher compared to lower pressure, high-NFU participants place more emphasis on the differentiating and relevant choice dimensions of a choice task.

Overall, we predicted that, because pressure favors focusing on the relevant differentiating factors, high-NFU participants under higher pressure would consider the duration advantage of the timeless product and thus show a tendency to prefer it. However, under lower pressure they may consider duration of uniqueness less, and thus their preferences could switch in favor of the (pre-tested to be) inferior trendy product.

#### Method

Pre-test - Stimuli Development. Ninety-eight participants (52.44% women,  $M_{age}$  = 35.97) were recruited online in exchange for monetary compensation to participate in this pre-test. They evaluated the picture and description of a dress shirt, in a two-cell between-participants design. The timeless (vs. trendy) dress shirt was described as providing uniqueness for "many years" (vs. "the current season"; Appendix 3). Each dress shirt was pre-tested for duration and degree of uniqueness, liking, purchase likelihood, difficulty in obtaining, commonness, status, and willingness to pay (Appendix 1). Analyses showed that the timeless dress shirt was better in several relevant dimensions. It exhibited significantly higher duration of uniqueness (seven-point scale;  $M_{timeless} = 2.91$ ;  $M_{trendy} = 2.08$ , p < .02), obtaining difficulty ( $M_{timeless} = 2.55$ ;  $M_{trendy} = 1.94$ , p < .04), and status ( $M_{timeless} = 3.55$ ;  $M_{trendy} = 2.67$ , p < .002). No other significant differences were found.

Participants. We recruited 218 participants (45.90% women,  $M_{age}$  = 36.04) from an online panel and assigned them randomly to a two-cell between-subjects design (higher vs. lower pressure).

*Procedure.* Participants saw the pre-tested dress shirts stimuli next to each other in random order. Participants in the higher-pressure condition had 40 seconds to choose (1 standard deviation more than the mean pre-tested time) and were told that this was "just enough" time to decide. Participants in the lower-pressure condition had 60 seconds (2 standard deviations more than the mean pre-tested time) and were told that this was "enough" time to decide. Participants in both conditions had adequate time to decide based on the pre-test. 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, 1977;  $\alpha = .85$ ).

# Results

Manipulation check. Participants in the higher-pressure condition ( $M_{Higher-pressure}$  = 4.07) felt more pressure than those in the lower-pressure one ( $M_{Lower-pressure}$  = 3.09; p < .001).

Hypotheses testing. A logistic regression with pressure (0 = lower; 1 = higher), NFU, and their interaction as independent variables, on choice (0 = trendy; 1 = timeless) revealed significant main effects of pressure ( $\beta$  = -4.79, t = -2.29, p < .03) and NFU ( $\beta$  = -0.96, t = -2.19, p < .03), qualified by a significant interaction effect ( $\beta$  = 1.58, t = 2.42, p < .02). A spotlight analysis at one standard deviation above and below the mean NFU score showed that, as predicted, high-NFU participants chose more (vs. less) often the timeless (vs. trendy) product under higher than under lower pressure (choice of timeless product: Higher pressure = 65.7%, lower pressure = 42.1%;  $\beta$  = .97, t = 2.34, p < .02; Figure 2). Choices of low-NFU participants were

unaffected by pressure (choice of timeless product: higher pressure = 52%, lower pressure = 63.4%; p > .24).

# [INSERT FIGURE 2 HERE]

#### Discussion

Study 1 supported our main hypothesis considering a timeless product that was better than its trendy counterpart not only in duration of uniqueness, but also in other relevant dimensions such as perceived product status. In these conservative conditions, one could expect that high-NFU individuals would tend to choose the timeless product under both higher and lower pressure, because of its advantages. We found that this was the case only under higher pressure. Under lower pressure, the choices of high-NFU individuals shifted in favor of the trendy product: 23.6% more high-NFU participants chose the (pre-tested to be) inferior trendy product under lower-pressure than under higher-pressure conditions.

This suggests that high-NFU participants evaluated options differently depending on the degree of pressure. Under higher pressure, they may evaluate relevant dimensions of the choice set and place emphasis on the salient differences between choices, and thus end up considering the duration of uniqueness of the timeless product when choosing. Under lower pressure, they may consider the relevant and differentiating information (e.g., duration of uniqueness) of the timeless product relatively less. In Study 2, we further examined this by pre-testing a different choice set in separate and comparative settings. In Study 3, we directly tested the aforementioned mechanism.

# STUDY 2: DOES PRESSURE AND NEED FOR UNIQUENESS INTERACT TO AFFECT CHOICE?

Study 2 tested H1 with four modifications relative to Study 1. First, we used a consequential choice between two women's cross-body bags with only female participants. Second, we manipulated psychological time pressure (instead of time availability), keeping available time constant for all participants. Third, for generalizability, we used a different measure of NFU: Consumer's Need for Uniqueness (CNFU; Tian et al., 2001), and specifically one of its dimensions that most closely describes the behavior of individuals interested in the duration of uniqueness of a product: Avoidance of similarity. This dimension captures whether individuals lose interest in outdated products (Tian et al., 2001). Finally, we conducted pre-tests using both separate and comparative evaluations to show that (a) the duration of uniqueness advantage of timeless products persists in both settings, whereas (b) trendy products may be perceived as more unique only when directly compared to timeless products, since one serves as an anchor for the other (Epley & Gilovich, 2006). We expected high-NFU individuals to choose based on the objective duration advantage under higher pressure, but to shift away from this advantage under lower pressure.

#### Method

# Pre-test - Stimuli Development

Separate evaluations pre-test. Eighty-two female participants ( $M_{age} = 35.21$ ) evaluated the description of a cross-body bag, in a two-cell between-participants design. The timeless (vs. trendy) bag was described as providing uniqueness for many years (vs. for the current season; *Appendix 4*). Each bag was evaluated for duration

and degree of uniqueness, as well as liking, purchase likelihood, difficulty in obtaining, commonness, status, and willingness to pay. The timeless bag was rated as having significantly higher duration of uniqueness (seven-point scale;  $M_{timeless} = 4.51$ ;  $M_{trendy} = 3.67$ , p < .02). No other significant differences emerged.

Comparative evaluations pre-test. Sixty-eight female participants ( $M_{age}$  = 33.29) directly compared the two cross-body bags in the same dimensions as the separate evaluations pre-test, on seven-point scales (later coded from -3 to 3), with the trendy and the timeless bags as the low and high anchors, respectively. Analyses revealed that the duration of uniqueness advantage of the timeless product persisted in comparative evaluations. The timeless product was considered to offer longer duration of uniqueness, with the average of the comparative measure being greater than the scale midpoint ( $M_{TimelessDuration}$  = .49 > 0; t (67) = 2.11; p < .04). As expected, the trendy product was perceived as more unique than the timeless one, with the average of the comparative measure being lower than the scale midpoint ( $M_{TrendyUnique}$  = -.51 < 0; t (67) = -2.37; p < .03), although this difference was not significant in separate evaluations. Thus, while in both evaluations the timeless product was perceived to offer longer uniqueness, in comparative evaluations only, a perceived advantage in uniqueness degree emerged. Then, if high-NFU individuals consider this inference under lower pressure, they will tend to choose relatively more the trendy option.

Moreover, in comparative evaluations, the timeless product was more liked and rated as a more likely purchase than the trendy one (p < .05). Thus, systematic shifts of choice away from timeless products could indicate an inferior decision.

Participants. We recruited 342 female participants ( $M_{age} = 35.94$ ) from an online panel and assigned them randomly 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. After reading, they chose one of the bags knowing that two of them, selected randomly, would actually get the bag of their choice. Everyone had 80 seconds to choose (1.5 standard deviations above the pre-test mean time). Only psychological time pressure, not actual time, was manipulated using an established procedure (Briley & Aaker, 2006): Participants in the higher- (vs. lower-) pressure condition were told that "Most people take about 120 (vs. 80) seconds to read the descriptions and choose." After reading the instructions of the psychological time pressure manipulation, participants chose one of the cross-body bags. Next, they completed the manipulation check (seven-point scale; "To what extent did you feel time pressure while you were choosing the bag?"), the CNFU scale (Tian et al., 2001; Tian & McKenzie, 2001;  $\alpha$  = .97), and the social dimension of the Risk-attitude scale (Weber, Blais, & Betz, 2002;  $\alpha$  = .73), to control for the effect of risk-taking behavior on choices as an alternative explanation.

#### Results

Manipulation check. Participants in the higher-pressure condition ( $M_{Higher-Pressure}$  = 4.45) felt more pressure than those in the lower-pressure one ( $M_{Lower-Pressure}$  = 3.77; p < .001).

Hypotheses testing. A logistic regression with pressure (0 = lower pressure; 1 = higher pressure), CNFU (as described in the introduction of this study), and their interaction as independent variables on choice (0 = trendy; 1 = timeless) showed a significant main effect of CNFU ( $\beta$  = -0.50, t = -2.75, p < .01), qualified by a significant interaction effect between pressure and CNFU ( $\beta$  = .49, t = 2.04, p < .05). A spotlight analysis at one standard deviation above and below the mean of CNFU score showed that high-CNFU participants tended to choose more the timeless product under higher than under lower pressure (choice of timeless product: Higher pressure = 69%, lower pressure = 52%;  $\beta$  = .72, t = 2.23, p < .02; Figure 3). Pressure did not affect the choices of low-CNFU participants (choice of timeless product: Higher pressure = 69%, lower pressure = 74%; p > .48).

# [INSERT FIGURE 3 HERE]

As a robustness check, these results remained substantively similar when the full CNFU scale was used in the analyses. Similarly, including the risk-taking attitude as a covariate showed identical results. Both the interaction between pressure and CNFU ( $\beta$  = .49, t = 2.03, p < .05), and the conditional effect of pressure on choice for high-CNFU participants ( $\beta$  = .72, t = 2.23, p < .03) remained significant. Risk-taking attitudes did not affect our findings ( $\beta$  = -.02, t = -.10, p > .91). These results ruled out risk-taking attitudes as an alternative explanation.

# Discussion

The results of study 2 complemented those of Study 1 to support H1. Under higher than under lower pressure, high-CNFU participants chose the timeless product relatively more. Pressure had no effect on choices of low-CNFU participants. Study 2 also indirectly examined what information participants rely on to make their choice. Consistent with our theory, choices of high-CNFU participants under higher pressure were aligned with the duration of uniqueness advantage of timeless products, suggesting that decisions rely on this dimension. However, choices of high-CNFU participants under lower pressure shifted away from the duration of uniqueness advantage. The next study directly examined the thoughts participants had while choosing.

# STUDY 3: FOCUS ON DURATION IN THE EFFECT OF PRESSURE AND NEED FOR UNIQUENESS ON THE CHOICE OF UNIQUE PRODUCT

Study 3 established the theoretical mechanism in three ways. We manipulated pressure via product availability (Lynn, 1991), we primed uniqueness instead of measuring chronic NFU, and we coded participants' thoughts about duration of uniqueness. Research suggests that product attributes that are considered when making a choice, are also more likely to be recalled fast and easily (Higgins, 1996; Lynch, Marmorstein, & Weigold, 1988; Petty & Cacioppo, 1981). If duration thoughts received relatively more weight when decisions were made under higher than under lower pressure (i.e., under low than under high product availability), participants should have more duration thoughts in this condition.

#### Method

Participants. We recruited 312 female participants ( $M_{age} = 35.7$ ) from an online panel and assigned them randomly to a 2 (prime: Uniqueness vs. Homogeneity) x 2 (product availability: Higher vs. Lower) between-subjects experiment.

Procedure. First, following an established procedure, participants were primed with either uniqueness or homogeneity (Maimaran & Wheeler, 2008). They 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., OOOOOO). 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 uniqueness-related (i.e. "distinctive" vs. "dostinctive"). For the homogeneity priming, they were homogeneityrelated (i.e. "uniform" vs. "aniform"). Next, we introduced our pressure manipulation via product availability. Participants were informed verbally and graphically that the two bags were "almost out of" (vs. "in") stock to manipulate higher (vs. lower) pressure, respectively. Then, participants engaged in the same potentially consequential choice task as Study 2, but this time without any mention of time. Finally, participants wrote down the thoughts they had while choosing and 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 ( $M_{Higher-pressure}$  = 3.09) felt more pressure than those in the lower-pressure one ( $M_{Lower-pressure}$  = 2.57; p < .002).

Hypotheses testing. The purpose of this study was to establish the underlying mechanism for our findings. To do so, participants' thoughts were coded as related to duration of uniqueness when mentioning the product's duration of uniqueness, either explicitly (e.g., "I want something timeless but unique") or implicitly (e.g., "I like to pick items that can be used often"). When there were no such mentions (e.g. "I like crossbody bags"), thoughts were coded as unrelated to duration of uniqueness.

Participants listed a similar number of thoughts between pressure conditions  $(M_{Higher\ Pressure}=3.40\ \text{vs.}\ M_{Lower\ Pressure}=3.49;\ p>.60)$ . As thoughts that influence decisions tend to come up first (Higgins, 1996; Petty & Cacioppo, 1981), two independent coders coded participants' first two thoughts, agreeing on 97.5% of the cases ( $\kappa=.93,\ p<.001$ ). Disagreements were resolved through discussion.

A moderated mediation analysis tested for the indirect effect of the interaction between pressure and uniqueness prime on choice, via number of thoughts related to 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 duration of uniqueness the mediator, and choice (0 = trendy; 1 = timeless) the dependent variable. Results showed a significant interaction effect between pressure and priming on the number of thoughts related to duration of uniqueness ( $\beta$  = .27, t = 2.03,  $\rho$  < .05; *Table 3*) and a significant effect of the number of thoughts related to duration of uniqueness on choice ( $\beta$  = 1.00, t = 3.65,  $\rho$  < .001).

The confidence interval (CI) of this moderated mediation excluded zero (95% CI: .018 to .660, index = .27), indicating a significant moderated mediation effect.

# [INSERT TABLE 3 HERE]

Next, we examined conditional indirect effects. The CI of the indirect effect for participants primed with homogeneity included zero (95% CI: -0.171 to .215). These participants' thoughts related to the duration of uniqueness did not differ between the pressure conditions ( $M_{Higher-Pressure} = .43$  vs.  $M_{Lower-Pressure} = .41$ ; p > .85). However, as predicted, the CI of the indirect effect for participants primed with uniqueness excluded zero (95% CI: .085 to .612). Specifically, participants primed with uniqueness listed relatively more thoughts related to the duration of uniqueness under higher versus lower pressure ( $M_{Higher-Pressure} = .62$  vs.  $M_{Lower-Pressure} = .33$ , p < .01;  $\beta = .29$ , t (148) = 2.86, p < .01). Then, more (vs. fewer) thoughts related to the duration of uniqueness increased tendency of choosing the timeless (vs. the trendy) product ( $\beta = .16$ , t (148) = 2.96, p < .01).

# Discussion

Study 3 extended the earlier findings and supported H2 in a context in which we manipulated both uniqueness and pressure. As argued earlier, this study showed that participants primed with uniqueness thought about duration of uniqueness more under higher than under lower pressure. Subsequently, thinking about duration of uniqueness increased the tendency of choosing the timeless versus the trendy product, as the former offers greater duration of uniqueness.

#### **GENERAL DISCUSSION**

Our article closely examines how different degrees of pressure affect consumer choices between equally unique products that differ only in the duration of uniqueness they offer. In this relevant setting for retailers and consumers, we performed three studies showing that high-NFU individuals tend to choose relatively more timeless products under higher pressure. However, these choices shift towards trendy products under lower pressure. Focus on duration of uniqueness mediates this interaction.

The design of our studies allowed us to explore different aspects of our research question. Results were replicated with three different forms of pressure (time availability, psychological time pressure, and product availability), two chronic measures of NFU (NFU and CNFU), and a uniqueness priming task. Study 1 found the predicted results even with a timeless product deliberately pre-tested as superior in several relevant dimensions. The higher tendency to choose the timeless product under higher than lower pressure suggests that high-NFU individuals focus more on the relevant and differentiating dimensions between options, and potentially consider the duration of uniqueness of the timeless product when choosing. Under lower pressure, this tendency shifts to trendy products, suggesting that high-NFU individuals focus less on these relevant differences.

Studies 2 and 3 replicated our results with consequential tasks. A pre-test for Study 2 showed that, indeed, direct comparisons can make a trendy product be perceived as more unique (Epley & Gilovich, 2006) which could explain why high-NFU shoppers under lower pressure would have greater preference for trendy products. Study 3 corroborated that the extent to which duration of uniqueness was evaluated during the decision mediated the proposed interaction. These findings provide

important theoretical contributions for understanding choices between unique products, and managerial implications for the marketing messages of unique product retailers.

This paper contributes to the literature on pressure and on unique product choices in several ways. First, our research helps to understand how two factors that co-exist in unique consumption settings—pressure created by marketers and NFU of consumers—can interact to affect consumer choices. Hence, we add to the important findings of previous research, which examined mainly independent effects of pressure (Ben Zur & Breznitz, 1980; Dhar & Nowlis, 1999; Parker, & Lehmann, 2011) and NFU (Chan et al., 2012; Simonson & Nowlis, 2000) on decision making. Our investigation shows that together, these factors can affect choices of products that offer uniqueness for different durations of time. By doing this, we demonstrate that the effects of pressure may be contingent on chronic or primed motivations such as NFU (Chan et al., 2012; Simonson & Nowlis, 2000), that are specific to the choice at hand (i.e., choices between unique products). For instance, in our case pressure affects choices of high-NFU individuals, but not the choices of low-NFU individuals.

Second, our work adds to the conceptual development of uniqueness, by identifying duration of uniqueness as a factor with important consequences. Previous research on uniqueness has focused mostly on choices between more versus less unique products (Lynn & Harris, 1997b; Snyder & Fromkin, 1980; Tian et al., 2001; Tian & McKenzie, 2001). We study choices between products with similar degrees of uniqueness, but with different durations of uniqueness. We demonstrate that differences in duration of uniqueness are relevant for choices. Hence, we complement the limited research on choices between equally unique products that differ in other dimensions (Berger & Ward, 2010; Han, Nunes, & Drèze, 2010). Together with

previous research, our results suggest that uniqueness is a multidimensional construct and its duration is an important dimension, alongside its degree (Lynn & Harris, 1997a), and the strength of conspicuous uniqueness-related signals (Berger & Ward, 2010; Han et al., 2010).

Third, by studying the contingent effects of pressure depending on NFU, we suggest possible ways to reconcile divergent findings in the literature studying the effects of pressure on processing and decision making: On one hand some studies show that pressure can lead to limited processing, such as choking, and thus poor decisions (Baumeister, 1984). Yet, other studies show that pressure can lead to better outcomes (Eisenberger & Aselage, 2009; Locke & Bryan, 1967; Latham & Locke, 1975), specifically when people are motivated to engage in a task (Scopelliti, Cillo, Busacca, & Mazursky, 2014). We demonstrate that the effects of pressure may be contingent on chronic or primed motivations such as NFU (Chan et al., 2012; Simonson & Nowlis, 2000), that are specific to the choice at hand (i.e., choices between unique products). For instance, in our case pressure affects choices of high-NFU individuals, but not the choices of low-NFU individuals.

Fourth, our findings are relevant to research on pressure and choices with a temporal focus (Soman et al., 2005). They suggest that pressure can shift the decision focus of individuals to trade-offs involving the duration of the product benefits.

Managerially, this paper has implications for marketers of unique products. Our pilot field-study suggested that sales professionals in the retail of unique products are not aware of how pressure can influence the choice of unique product, although this knowledge would have a positive effect on their business. Thus, our findings provide valuable guidance on how retailers offering unique products (e.g., exclusive branded

stores) can manage pressure. They suggest that pressure could shift the attention of shoppers that have high NFU towards duration of uniqueness. This shift may highlight the advantage of timeless products, and thus boost their sales. However, pressure could obscure the attributes of trendy products, and thus hinder their sales. Therefore, retailers of trendy products should use low-pressure marketing messages to boost the sales of trendy products. In addition, our studies also suggest that retailers can obtain these outcomes with various forms of pressure, such as time pressure or product availability.

In our pilot field-study, we also found that retail professionals considered timeless products as better investments. Additionally, the pre-tests of Study 2 (separate and comparative) showed that individuals considered the timeless product to offer longer lasting uniqueness than the trendy one. These results together suggest that timeless products can be a better option for shoppers of unique products, as they allow high-NFU individuals to maintain their uniqueness for longer (Ruvio, 2008). If timeless products can satisfy uniqueness needs for longer periods, then they can potentially help shoppers save money compared to repeatedly purchasing trendy products, possibly leading to higher satisfaction. Thus, purchasing unique products under higher pressure (e.g., right before stores close) might be a smart self-control strategy that consumers can use to advance choices of timeless products.

The findings of this study suggest different avenues for future research. For instance, our 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 choosing between unique products, or the projection of specific types of uniqueness (e.g., being an expert) might also moderate the effects of pressure. More studies are needed to

understand how context-specific motivations may moderate the effects of pressure on consumers' choices.

We used three forms of pressure, focusing on sources of pressure that could be manipulated by companies through appeals related to limited time or limited product quantity. Other important sources of pressure (e.g., social pressure or competition) can be investigated by future research, adding to the generalizability of our results. Also, to avoid unwanted confounding effects, we did not examine branded products. As brands can be important in symbolizing uniqueness, future research could offer a deeper understanding of our results using brands as a source of uniqueness.

Lastly, future investigations could examine the effect of pressure on choices involving other dimensions of unique products, such as the strength of conspicuous signals, the purpose (to project status vs. knowledge) and audience (in-group vs. outgroup) of the consumption, or the means of projecting uniqueness (e.g., price vs. brand). We believe that this variety of research possibilities, highlights the potential of this research to open up fruitful avenues for future research.

# REFERENCES

- Andrews, F. M., & Farris, G. F. (1972). Time pressure and performance of scientists and engineers: A five-year panel study. *Organizational Behavior and Human Performance*, 8(2), 185-200.
- Ariely, D., & Wertenbroch, K. (2002). Procrastination, deadlines, and performance: Self-control by precommitment. *Psychological Science*, 13(3), 219-224.
- Baer, M., & Oldham, G. R. (2006). The curvilinear relation between experienced creative time pressure and creativity: moderating effects of openness to experience and support for creativity. *Journal of Applied Psychology*, 91(4), 963.
- Baumeister, R. F. (1984). Choking under pressure: Self-consciousness and paradoxical effects of incentives on skillful performance. *Journal of Personality and Social Psychology*, 46(3), 610-620.
- Ben Zur, H., & Breznitz, S. J. (1981). The effect of time pressure on risky choice behavior. *Acta Psychologica*, 47(2), 89-104.
- Berger, J., & Le Mens, G. (2009). How adoption speed affects the abandonment of cultural tastes. *Proceedings of the National Academy of Sciences*, 106(20), 8146-8150.
- Berger, J., & Ward, M. (2010). Subtle signals of inconspicuous consumption. *Journal of Consumer Research*, 37(4), 555-569.

- Bettman, J. R., Johnson, E. J., Luce, M. F., & Payne, J. W. (1993). Correlation, conflict, and choice. *Journal of Experimental Psychology*: Learning, Memory, and Cognition, 19(4), 931.
- Bozzolo, A. M., & Brock, T. C. (1992). Unavailability effects on message processing:

  A theoretical analysis an empirical test. *Basic and Applied Social Psychology,*13(1), 93-101.
- Briley, D. A., & Aaker, J. L. (2006). When does culture matter? Effects of personal knowledge on the correction of culture-based judgments. *Journal of Marketing Research*, 43(3), 395-408.
- Brock, T. C. (1968). Implications of commodity theory for value change.

  \*Psychological Foundations of Attitudes, 243-275.
- Bronner, R. (1982). Decision making under time pressure. Lexington, MA: DC Heath.
- Burns, D. J., & Brady, J. (1992). A cross-cultural comparison of the need for uniqueness in Malaysia and the United States. *Journal of Social Psychology*, 132(4), 487-495.
- Chan, C., Berger, J., & Van Boven, L. (2012). Identifiable but not identical:

  Combining social identity and uniqueness motives in choice. *Journal of Consumer Research*, 39(3), 561-573.
- Cialdini, R. B. (2007). *Influence : The psychology of persuasion* (Rev. ed. ed.). New York : HarperCollins.
- D'Arpizio, C., & Levato, F. (2017). Luxury Goods Worldwide Market Study Fall-Winter 2014: The Rise of the Borderless Consumer. Retrieved January 24,

- 2018 from http://www.bain.com/publications/articles/luxury-goods-worldwide-market-study-december-2014.aspx
- Dhar, R., & Nowlis, S. M. (1999). The effect of time pressure on consumer choice deferral. *Journal of Consumer Research*, 25(4), 369-384.
- Dhar, R., Nowlis, S. M., & Sherman, S. J. (2000). Trying hard or hardly trying: An analysis of context effects in choice. *Journal of Consumer Psychology*, 9(4), 189-200.
- Eisenberger, R., & Aselage, J. (2009). Incremental effects of reward on experienced performance pressure: Positive outcomes for intrinsic interest and creativity. *Journal of Organizational Behavior*, 30(1), 95-117.
- Emmelhainz, M. A., Stock, J. R., & Emmelhainz, L. W. (1991). Consumer responses to retail stock-outs. *Journal of Retailing*, *67*(2), 138.
- Epley, N., & Gilovich, T. (2006). The anchoring-and-adjustment heuristic Why the adjustments are insufficient. *Psychological Science*, 17(4), 311-318.
- Fromkin, H. L. (1970). Effects of experimentally aroused feelings of undistinctiveness upon valuation of scarce and novel experiences. *Journal of Personality and Social Psychology*, 16(3), 521.
- Ge, X., Messinger, P. R., & Li, J. (2009). Influence of soldout products on consumer choice. *Journal of Retailing*, 85(3), 274-287.
- Gentina, E., Shrum, L. J., & Lowrey, T. M. (2016). Teen attitudes toward luxury fashion brands from a social identity perspective: A cross-cultural study of

- French and U.S. teenagers. *Journal of Business Research*, 69(12), 5785-5792.
- Han, Y. J., Nunes, J. C., & Drèze, X. (2010). Signaling status with luxury goods: The role of brand prominence. *Journal of Marketing*, 74(4), 15-30.
- Heckert, D. M. (1989). The relativity of positive deviance: The case of the French Impressionists. *Deviant Behavior*, 10(2), 131-144.
- Higgins, E. T. (1996). Knowledge activation: Accessibility, applicability, and salience. In E. T. Higgins & A. Kruglanski (Eds.), *Social psychology: Handbook of basic principles* (pp.133-168). New York: Guilford Press.
- Huang, X., Dong, P., & Mukhopadhyay, A. (2014). Proud to belong or proudly different? Lay theories determine contrasting effects of incidental pride on uniqueness seeking. *Journal of Consumer Research*, *41*(3), 697-712.
- Inman, J. J., McAlister, L., & Hoyer, W. D. (1990). Promotion signal: proxy for a price cut? *Journal of consumer research*, *17*(1), 74-81.
- lyer, E. S. (1989). Unplanned purchasing: Knowledge of shopping environment and time pressure. *Journal of Retailing*. 65(1), 40.
- Kristofferson, K., McFerran, B., Morales, A. C., & Dahl, D. W. (2016). The Dark Side of Scarcity Promotions: How Exposure to Limited-Quantity Promotions Can Induce Aggression. *Journal of Consumer Research*, 43(5), 683-706.
- Latham, G. P., & Locke, E. A. (1975). Increasing productivity and decreasing time limits: A field replication of Parkinson's law. *Journal of Applied Psychology*, 60(4), 524-526.

- Lin, C.-H., Sun, Y.-C., Chuang, S.-C., & Su, H.-J. (2008). Time pressure and the compromise and attraction effects in choice. *Advances in Consumer Research*, 35(3), 348-352.
- Locke, E. A., & Bryan, J. F. (1967). Performance goals as determinants of level of performance and boredom. *Journal of Applied Psychology*, 51(2), 120.
- Lynch Jr, J. G., Marmorstein, H., & Weigold, M. F. (1988). Choices from sets including remembered brands: Use of recalled attributes and prior overall evaluations. *Journal of Consumer Research*, 15(2), 169-184.
- Lynn, M. (1991). Scarcity effects on value: A quantitative review of the commodity theory literature. *Psychology & Marketing*, 8(1), 43-57.
- Lynn, M., & Harris, J. (1997a). Individual differences in the pursuit of self-uniqueness through consumption. *Journal of Applied Social Psychology*, 27(21), 1861-1883.
- Lynn, M., & Harris, J. (1997b). The desire for unique consumer products: A new individual differences scale. *Psychology and Marketing*, 14(6), 601-616.
- Lynn, M., & Snyder, C. R. (2002). Uniqueness seeking. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of positive psychology* (pp. 395-410). New York: Oxford University Press.
- Maimaran, M., & Wheeler, S. C. (2008). Circles, squares, and choice: The effect of shape arrays on uniqueness and variety seeking. *Journal of Marketing*Research, 45(6), 731-740.

- Maule, A. J., Hockey, G. R. J., & Bdzola, L. (2000). Effects of time-pressure on decision-making under uncertainty: changes in affective state and information processing strategy. *Acta Psychologica*, 104(3), 283-301.
- Maule, A. J., & Svenson, O. (1993). Theoretical and empirical approaches to behavioral decision making and their relation to time constraints. *Time Pressure and Stress in Human Judgment and Decision Making*, 3-25.
- Nunes, J. C., Drèze, X., Cillo, P., Prandelli, E., & Scopelliti, I. (2012). How Fashion

  Designers Develop New Styles: Creative Epiphany Versus Market Feedback.

  NA-Advances in Consumer Research, Volume 40.
- Parker, J. R., & Lehmann, D. R. (2011). When shelf-based scarcity impacts consumer preferences. *Journal of Retailing*, 87(2), 142-155.
- Payne, J., Bettman, J. R., & Johnson, E. J. (1991). Consumer decision making. *Handbook of Consumer Behaviour*, 50-84.
- Pesendorfer, W. (1995). Design innovation and fashion cycles. *The American Economic Review*, 85(4), 771-792.
- Petty, R. E., & Cacioppo, J. T. (1981). Social psychological procedures for cognitive response assessment: The thought-listing technique. In T. V. Merluzzi, C. R. Glass, & M. Genert (Eds.), *Cognitive Assessment* (pp. 309-342).
- Roux, C., Goldsmith, K., & Bonezzi, A. (2015). On the psychology of scarcity: When reminders of resource scarcity promote selfish (and generous) behavior. *Journal of Consumer Research*, 42(4), 615-631.

- Ruvio, A. (2008). Unique like everybody else? The dual role of consumers' need for uniqueness. *Psychology & Marketing*, 25(5), 444-464.
- Scopelliti, I., Cillo, P., Busacca, B., & Mazursky, D. (2014). How do financial constraints affect creativity? *Journal of Product Innovation Management*, 31(5), 880-893.
- Simmel, G. (1957). Fashion. American Journal of Sociology, 62(6), 541-558.
- Simonson, I., & Nowlis, S. M. (2000). The role of explanations and need for uniqueness in consumer decision making: Unconventional choices based on reasons. *Journal of Consumer Research*, 27(1), 49-68.
- Snyder, C. R. (1977). Abnormality as a positive characteristic: The development and validation of a scale measuring need for uniqueness. *Journal of Abnormal Psychology*, 86(5), 518-527.
- Snyder, C. R. (1992). Product scarcity by need for uniqueness interaction: A consumer catch-22 carousel? *Basic and Applied Social Psychology*, 13(1), 9-24.
- Snyder, C. R., & Fromkin, H. L. (1980). *Uniqueness: The human pursuit of difference*. New York: Plenum Press.
- Soman, D., Ainslie, G., Frederick, S., Li, X., Lynch, J., Moreau, P., Mitchell, A., Read, D., Sawyer, A., Trope, Y., Wertenbroch, K., Zauberman, G. (2005). The psychology of intertemporal discounting: Why are distant events valued differently from proximal ones? *Marketing Letters*, 16(3), 347-360.

- Sproles, G. B. (1981). Analyzing fashion life cycles: Principles and perspectives. *Journal of Marketing*, 45(4), 116-124.
- Suri, R., Kohli, C., & Monroe, K. B. (2007). The effects of perceived scarcity on consumers' processing of price information. *Journal of the Academy of Marketing Science*, 35(1), 89-100.
- Suri, R., Monroe, K., & Koc, U. (2013). Math anxiety and its effects on consumers' preference for price promotion formats. *Journal of the Academy of Marketing Science*, 41(3), 271-282.
- Svenson, O., Edland, A., & Slovic, P. (1990). Choices and judgments of incompletely described decision alternatives under time pressure. *Acta Psychologica*, 75(2), 153-169.
- Thompson, S., Gooner, R., & Kim, A. (2015). Your mileage may vary: Managing untargeted consumers' reactions to promotions. *Journal of the Academy of Marketing Science*, *43*(6), 713-729.
- 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(1), 15-42.
- Tian, K. T., Bearden, W. O., & Hunter, G. L. (2001). Consumers' need for uniqueness: Scale development and validation. *Journal of Consumer Research*, 28(1), 50-66.

- Tian, K. T., & McKenzie, K. (2001). The long-term predictive validity of the consumers' need for uniqueness scale. *Journal of Consumer Psychology*, 10(3), 171-193.
- Weber, E. U., Blais, A. R., & Betz, N. E. (2002). A domain-specific risk-attitude scale: Measuring risk perceptions and risk behaviors. *Journal of Behavioral Decision Making*, 15(4), 263-290.
- Worchel, S., Lee, J., & Adewole, A. (1975). Effects of supply and demand on ratings of object value. *Journal of Personality and Social Psychology*, 32(5), 906.
- Wright, P. (1974). The harassed decision maker: Time pressures, distractions, and the use of evidence. *Journal of Applied Psychology*, 59(5), 555-561.
- Zheng Zhou, K., & Nakamoto, K. (2007). How do enhanced and unique features affect new product preference? The moderating role of product familiarity. *Journal of the Academy of Marketing Science*, 35(1), 53-62.

#### **APPENDICES**

Appendix 1: Pre-test: Dress-shirt (vs. Cross-body bag)—pre-tested questions

- For <u>how long</u> do you think that the person who buys this dress-shirt (vs. bag)
   will feel <u>unique</u>? (from 1= For a very short period of time; to 7= For a very long period of time)
- How <u>unique</u> do you think this dress-shirt (vs. bag) is? (from 1= Not unique at all; to
   7= Very unique)
- To what extent do you think that the person who buys this dress-shirt (vs. bag) feels <u>unique</u>? (from 1= Not unique at all; to 7= Very unique)
- Do you <u>like</u> this dress-shirt (vs. bag)? (from 1= No, I do not like it at all; to 7= Yes,
   I like it very much)
- How <u>likely would you be to buy</u> this dress-shirt (vs. bag)? (from 1= Very unlikely;
   to 7= Very likely)
- How <u>difficult</u> do you think it would be to get this dress-shirt (vs. bag)? (from 1= Very easy; to 7= Very difficult)
- How <u>common</u> do you think this dress-shirt (vs. bag) is? (from 1= Very uncommon;
   to 7= Very common)
- How <u>popular</u> do you think this dress-shirt (vs. bag) is? (from 1= Very unpopular; to 7= Very popular)
- To what degree do you think this dress-shirt (vs. bag) conveys the following benefits?

	Very low			Somewhat			Very
	1	2	3	4	5	6	high
							7
Status	0	O	O	O	O	O	O
Prestige	0	O	O	O	O	O	0
Exclusiveness	0	0	0	0	0	0	0

Dress-shirt (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 bag? 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) in order 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?

# Trendy product description and picture

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, since 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.

# Timeless product description and picture

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, since 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.

# Trendy cross-body bag description

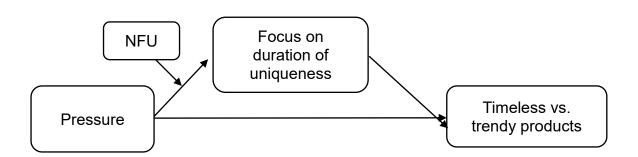
This ultimate fashion cross body bag is made from unique fabric. Its original floral pattern makes the bag trendy for the coming spring season. This chic model is only being offered in a few stores. Definitely, this is the choice of a woman who wants to express her individuality this spring.

### Timeless cross-body bag description

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.

FIGURE 1

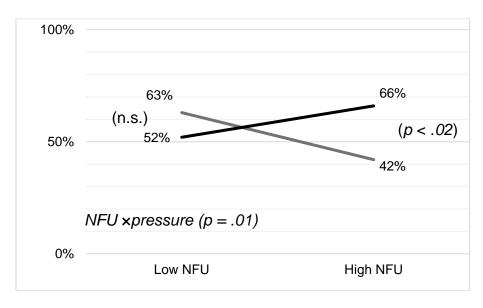
# **CONCEPTUAL MODEL**



PERCENTAGE OF PARTICIPANTS CHOOSING THE TIMELESS (VS. TRENDY)

PRODUCT (STUDY 1)

FIGURE 2



■ Lower pressure ■ Higher pressure

FIGURE 3

PERCENTAGE OF PARTICIPANTS CHOOSING THE TIMELESS (VS. TRENDY)

PRODUCT (STUDY 2)

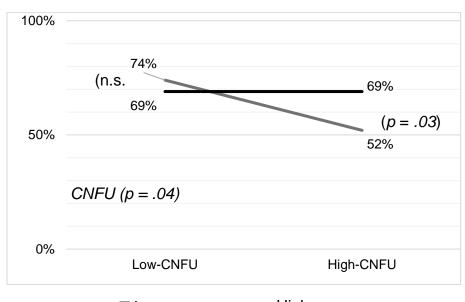


Table 1: Empirical contributions on effects of pressure and information processing, revealing that pressure makes individuals focus on specific information

Study	Type of pressure	Dependent variable	Key findings on information processing
Wright (1974)	Time pressure     Distraction	Positive vs. negative dimensions	<ul> <li>Under pressure, individuals focus on less dimensions than under low pressure</li> </ul>
Worchel, Lee, & Adewole (1975)	Supply scarcity	Value	<ul> <li>Under pressure, individuals put more attention into the decision than under low pressure</li> </ul>
Ben Zur, & Breznitz (1980)	Time pressure	Risky choices	Under pressure, individuals focus more on relevant dimensions than under low pressure
Payne, Bettman & Johnson (1988)	Time pressure	Processing of information	Under pressure, individuals initially evaluate a limited number of attributes of all alternatives
Svenson, Edland, & Slovic (1990)	Time pressure	Choices of partially described alternatives	<ul> <li>Under pressure, individuals focus on positive attributes</li> <li>Under low pressure, individuals focus on common attributes</li> </ul>
Bozzolo, & 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, & Nowlis (1999)	Time pressure	Choice deferral	Under pressure individuals focus more on unique differences between options than under low pressure
Maule, Hockey, & Bdzola (2000)	Time pressure	Choice of risky or safe option	Under pressure, individuals filter and accelerate information processing
Suri, Kohli, & Monroe (2007)	Product temporal scarcity	Motivation to process information	Under pressure, motivated individuals process less information than unmotivated individuals

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

Study	Contextual and/or chronic uniqueness	Dependent variable	Key findings
Fromkin (1970)	Contextual NFU, manipulated through feedback from a test	Preference for scarce vs. plentiful experiences	Individuals high in NFU prefer scarce over plentiful experiences
Simonson & Nowlis (2000)	Chronic NFU¹ (Snyder, 1977)	Preference for unconventional vs. conventional choices	Individuals high in NFU who explain their decisions, tend to make less conventional choices
Tian, Bearden, & Hunter (2001) Scale development	Chronic CNFU <sup>2</sup>	Preference for unique vs. common exterior designs	Individuals high in CNFU prefer unique over common exterior designs
Lynn & Harris (1997) Scale development	Chronic DUCP <sup>3</sup>	Preference for scarce, new, and customized vs. non- scarce, outdated, and massive products	Individuals high in DUCP prefer scarce, new, and customized products over non-scarce, outdated, and massive products
Maimaran & Wheeler (2008)	<ul> <li>Contextual NFU, manipulated through geometrical shapes</li> <li>Chronic CNFU (Tian, et. al. 2001)</li> </ul>	Preference for unique versus common objects	Individuals high in CNFU or primed with uniqueness tend to choose more unique objects
Chan, Berger & Van Boven (2012)	<ul> <li>Contextual NFU, manipulated through geometrical shapes (Maimaran &amp; Wheeler, 2008)</li> <li>Chronic CNFU (Tian, et. al. 2001)</li> </ul>	Preference for more vs. less popular options among social groups	Individuals high in NFU prefer less popular options over more popular ones, among those options that are associated with their social group
Huang, Dong, & Mukhopadhyay (2014)	Chronic DUCP (Lynn & Harris, 1997)	Preference for more vs. less distinctive option	Individuals who perceive themselves as higher in uniqueness prefer more distinctive over less distinctive options

<sup>&</sup>lt;sup>1</sup> NFU: Need for Uniqueness (Snyder & Fromkin, 1977)

<sup>&</sup>lt;sup>2</sup> Consumer's Need for Uniqueness (Tian, Bearden, & Hunter, 2001)

<sup>&</sup>lt;sup>3</sup> DUCP: Desire for Unique Consumer Products (Lynn & Harris, 1997)

#### TABLE 3

# **MODERATED MEDIATION ANALYSIS (STUDY 3)**

Indirect effect showing (a) a significant interaction effect between pressure and priming on the number of duration thoughts, and (b) a significant effect of the number of duration thoughts on choice<sup>1</sup>

1. Mediator variable model: dependent variable—number of duration thoughts

Predictor	β	Lower CI	Upper CI
Pressure	.02 (.09)	<b>−.17</b>	.20
Priming	08 (.09)	26	.10
Pressure ×Priming*	.27 (.13)	.008	.54

# 2. Dependent variable model: dependent variable—choice (0 = trendy; 1 = timeless)

Predictor	β	Lower CI	Upper CI
Number of duration	1.00 (.27)	.46	1.53
thoughts***			
Pressure	16 (.38)	90	.57
Priming	26 (.37)	98	.47
Pressure x Priming	02 (.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	.28 (.13)	.085	.612
Number of duration thoughts	Homogeneity	.02 (.10)	171	.215

<sup>\*</sup> p < .05, \*\* p < .01, \*\*\* p < .001.

Standard errors are shown in parentheses next to coefficient estimates

<sup>&</sup>lt;sup>1</sup>Numbers in **bold** show the predicted significant moderated mediation path.

#### CHAPTER III

# THE UNSPEAKABLE DARK SIDE OF STATUS: LOW COLOR-VALUE SIGNALS STATUS, UNLESS YOU MENTION IT

Individuals frequently seek to increase their status through their choice of products (Levy, 1959; Veblen, 1899). Products can signal status through visual elements (Heffetz, 2007; Veblen, 1899) such as size (Berger & Ward, 2010; Dubois, Rucker, & Galinsky, 2012; Han, Nunes, & Drèze, 2010), or special ornaments (Berry, 1994). Color is visual element with important signaling effects (Hoegg, Alba, & Dahl, 2010) that many high-end brands use systematically (e.g., Hermes and its iconic orange). Specifically, color-*value* –the degree of darkness (i.e., low color-value) or lightness (i.e., high color-value; Gorn, Juang, & Banaji, 1997) of a color – has important signaling properties. For example, it can impact perceptions of weight (Walker, Francis, & Walker, 2010) and durability (Hagtvedt, 2014) of objects. This research studies *when and how color-value influences* 

Can color-value signal status? Interestingly, two streams of literature suggest opposing predictions. On the one hand, literature on perceptions induced by color suggests that low color-value (i.e. dark colors) increases perceptions of power, while high color-value (i.e. light colors) increases perceptions of weakness (Amhorst & Reed, 1986; Labrecque, Patrick, & Milne, 2013; Valdez & Mehrabian, 1994). Given the positive relationship between power and status (Anderson, Hildreth, & Howland, 2015; Magee & Galinsky, 2008), it might be that low color-value increases perceptions of status too. Consequently, individuals seeking status should prefer low color-value (dark) over high color-value (light) products.

On the other hand, the status signaling literature posits that indicators of status are valid and effective if they are costly or difficult to obtain (Dubois & Ordabayeva, 2015; Nelissen & Meijers, 2011; Veblen, 1899). From this perspective, color-value cannot be a status signal, since it is neither costly nor difficult to obtain. Thus, color-value might not influence perceptions of status. Consequently, individuals seeking status should not have any particular preference for low color-value (i.e., dark) over high color-value (i.e., light) products.

These seemingly divergent predictions call for a deeper understanding of the processes underlying when and how color-value can influence perceptions of status. In this article, we reconcile these streams of research by arguing that because color-value is non-costly and easy to obtain, it is a "weak" status signal, which is effective only under certain conditions. First, individuals seeking status could be more prone to infer status even from weak status signals (Han et al., 2010), compared to individuals possessing status. Accordingly, if color-value is a weak status signal, it may influence perceptions of status only for status-seeking individuals. Second, when weak evidence is salient during evaluations, it may be discounted (Greenwald, McGhee, & Schwartz, 1998). Thus, if color-value is a weak status signal, it may have limited influence on perceptions of status when it is salient during status evaluations. Hence, consistent with other color-signaling effects (Hoegg & Alba, 2006; Mahnke, 1996), color-value may influence perceptions of status only when it is not salient during status evaluations.

Our research makes several contributions to theory. First, it contributes to research on conspicuous consumption by reconciling two conflicting research

streams. While the literature studying perceptions induced by color suggests that color-value may signal status, the status signaling literature suggests the opposite. We propose and show that color-value can influence perceptions of status but only when individuals are seeking for status, and when color-value is not salient during status evaluations. Thus, we identify conditions under which even weak signals of status can impact status.

Second, we add to literature on the influence of product visual elements on perceptions. Our investigation goes beyond prior literature showing that color-value influences perceptions of physical properties such as weight (Alexander & Shansky 1976; Walker, Francis, and Walker 2010). We demonstrate that color-value can also influence perceptions of conceptual constructs such as status, a fundamental human motive that has strong impact in well-being (Anderson, Hildreth, & Howland, 2015). Finally, we demonstrate that the influence on perceptions of status has downstream consequences for consumers' preferences.

The remainder of this paper is organized as follows. We first discuss the relevant literature and summarize the theoretical framework that guides this research. We state our hypotheses. Then, we offer a description and results of a lab study, a field study and three experiments. We conclude with a discussion of the theoretical and managerial contributions.

#### **CONCEPTUAL BACKGROUND**

### Perceptions induced by Color-Value

Visual elements of products such as color have symbolic connotations that are not part of the product's appearance (Van Rompay, Pruyn, & Tieke, 2009). These connotations influence consumers' perceptions (Chattopadhyay, Gorn, & Darke, 2010; Cian, Krishna, & Elder, 2014; Gorn, Jiang, & Johar, 2008; Hoegg et al., 2010) and product evaluations (Hagtvedt, 2011).

Color is a central visual feature that influences consumer perceptions and choices (Aslam, 2006; Bellizzi, Crowley, & Hasty, 1983; De Bock, Pandelaere, & Van Kenhove, 2013). Color is composed by hue, chroma, and value. *Hue* is defined as the pigment of the color (e.g., red, yellow, green, blue). *Chroma* is the saturation or richness of the color. *Color-value* is the degree of darkness or lightness of the color that can go from pure black (0% of low color-value), to pure white (100% of high color-value; Gorn, Chattopadhyay, Yi, & Dahl, 1997). Prior research suggests that color-value influences product perceptions (Mahnke, 1996). For instance, low color-value increases perceptions of weight (Alexander & Shansky, 1976; Hagtvedt, 2014; Walker et al., 2010), but decreases perceptions of size (Gundlach & Macoubrey, 1931; Mahnke, 1996; Nakatani, 1989) in objects.

In research closer to ours, scholars have investigated the influence of color-value on perceptions of constructs related to status. For example, lower color-value increases perceptions of dominance in comparison to high color-value colors (Valdez & Mehrabian, 1994). Consistent with these findings,

Amhorst and Reed (1986) demonstrated that job applicants wearing low color-value jackets were perceived as being more powerful and competent compared to applicants wearing high color-value jackets. Conversely, higher color-value increases perceptions of weakness (Amhorst & Reed, 1986; Labrecque, Patrick, & Milne, 2013; Valdez & Mehrabian, 1994). This suggests that color-value might influence perceptions of status. We explore this association in the following section.

#### Color-Value as a Signal of Status

Status refers to the rank individuals hold in a hierarchy (Ridgeway & Walker, 1995). The motivation to possess status is called *need for status* (Dubois, Rucker, & Galinsky, 2012; Magee & Galinsky, 2008), and it can be reflected in the tendency to purchase status products (Eastman, Goldsmith, & Flynn, 1999). This motivation can vary among individuals. While individuals having status look to maintain their position, individuals who lack status seek to increase their status, and thus look for status signals (Han et al., 2010). A way in which they can increase their status is through the products they choose (Belk, Bahn, & Mayer, 1982; Dubois & Ordabayeva, 2015; Veblen, 1899). In this research, we propose that low color-value in products can influence perceptions of status, but only for status-seeking individuals, and when color-value is not salient during status evaluations.

As outlined in the previous section, color-value can be associated with power - the perceived asymmetric control over desirable resources (Magee &

Galinsky, 2008; Rucker, Galinsky, & Dubois, 2012). Power is a distinct construct from status (Dubois, Rucker, & Galinsky, 2012), but these constructs are related. Both power and status give to the individual the ability to influence others (Anderson et al., 2015; Magee & Galinsky, 2008; Rucker, Dubois, & Galinsky, 2011). Both constructs are based on hierarchies (Magee & Galinsky, 2008), and they can reinforce and compensate for each other (Dubois et al., 2012): being powerful can lead to high status, and high status can lead to acquiring power. Indeed, states of powerlessness increase the desire for status and lead consumers to prefer high-status products (Charles, Hurst, & Roussanov, 2009; Rucker & Galinsky, 2008; Wong & Shavitt, 2010). Given that power and status are related constructs, and that low color-value signals power, a straightforward prediction could be that individuals will perceive higher status from low color-value products than from high color-value ones. We sustain that this relationship is not so straightforward.

Literature suggests that status signals must be costly or difficult to obtain (Connelly, Certo, Ireland, & Reuztzel, 2011; Nelissen & Meijers, 2011; Spence, 1973; Veblen, 1899). However, color-value is neither. For instance, the exact same product (e.g., a handbag) is often available to consumers at a variety of color-values, and at the same price. Thus, color-value may be a weak status signal, potentially signaling status only under certain conditions. We propose that the first condition is the status seeking state of the individual.

Research shows that individuals seeking status tend to look for status signals more than those who already have status (Han et al., 2010). Thus, individuals seeking status, could be more prone to infer status even from weak

status signals such as color-value, compared to individuals already possessing status. Thus, low color-value may increase perceptions of status, but only for individuals seeking status. Then, increased perceptions of status should increase preferences for status products (Veblen, 1899).

#### We hypothesize:

**H1:** Individuals seeking status will prefer lower color-value (i.e., darker) over higher color-value (i.e., lighter) products. This effect will not hold for individuals high in status.

**H2:** Perceptions of status mediate this relationship: Individuals seeking status will perceive higher status from lower color-value products than from higher color-value ones. This effect on perceptions of status will then affect preferences. These effects will not hold for individuals high in status.

### Saliency and the influence of color-value on status

Implicit associations are manifested as behaviors or choices that result from automatically activated links, without the individual's awareness of that causation (Greenwald & Banaji, 1995). Substantial research suggests that the influence of color on perceptions can be implicit (Hoegg & Alba, 2006; Mahnke, 1996). We propose that the influence of color-value on perceptions of status can also be implicit. So, if our hypothesized association between color-value and status occurs, it might be activated and sustained if color-value is not salient during status evaluations. However, if color-value is salient during status evaluations,

individuals will consider it and include it as information in the evaluation process. Thus, the effect of color-value on perceptions of status may be attenuated because individuals will notice color-value is not a valid status signal, as we have argued.

We hypothesize that,

**H3:** Preference for lower color-value over higher color-value (i.e., lighter) products by individuals seeking status (H1) will hold only when color-value is not salient during status evaluations.

**H4:** The positive effect of lower color-value products on perceptions of status, and the subsequent effect on preference (H2) will hold only when color-value is not salient during status evaluations.

#### **OVERVIEW OF STUDIES**

We carried out five studies to test our hypotheses. Study 1 showed that priming status-seeking states increases the preference for lower color-value (i.e., darker) products (H1), using a real and consequential choice task in a controlled setting. Study 2 provided convergent field evidence that confirmed previous findings, and highlighted the relevance of our research for managers and consumers. Study 3 demonstrated that individuals perceive higher status from lower color-value products than from higher color-value (i.e., lighter) products (H2), but these perceptions are attenuated when color-value is salient (H4). Studies 4 and 5 tested the full model: individuals seeking status perceive higher

status (H2), and thus prefer low (vs. high) color-value products (H1), but only when color-value is not salient during evaluations (H3, H4). Study 4 increased the generalizability of our predictions by measuring chronic tendencies to purchase status products, instead of manipulating status seeking states. Study 5 provided further evidence for the role of saliency on the relationship between color-value and status. We put participants under cognitive load while making color-value salient during evaluations. This allowed us to demonstrate that the effect of color-value on perceptions of status is a product of individuals' implicit considerations. Across studies, we used a variety of products with different hues, chromas, and color-values to provide robust tests for our hypotheses.

#### STUDY 1: DOES STATUS INFLUENCE CHOICE OF DARK PRODUCTS?

Study 1 investigated whether individuals seeking status prefer products with lower color-value (darker), and if this preference does not hold for individuals high in status (H1).

#### Method

Participants. One hundred and eighteen graduate students (31 females;  $M_{age} = 23.94$ ) participated in this lab study in partial fulfillment of course requirements.

Procedure. Participants were randomly assigned to a two-cell between-participants design: high-status, and low-status. They were seated in

front of a computer. Following an established priming task (see Dubois, Rucker, & Galinsky, 2010), participants in the high (vs. low) status condition were asked to imagine as vividly as possible what it would be like to be a boss (vs. an employee) at a company.

After this priming task, participants were given a paper questionnaire. In order to complete it, they were offered 6 pens (3 white, and 3 black pens, see *Figure 1*) to choose from. They were also told that the chosen pen was theirs to keep after the study had finished. Our dependent variable was participants' choice of pen (either white or black). Pens were of the same model, design, hue, and price. They only differed in their color-value (i.e. darkness).

#### [INSERT FIGURE 1 HERE]

The questionnaire contained a question asking participants' thoughts on whether the product darkness (or lightness) can indicate status (1 = yes, 2 = no). This allowed us to understand if individuals considered color-value as a signal of status when asked explicitly. Finally, participants answer a manipulation check assessing status state (Dubois, Rucker, & Galinsky, 2010).

#### Results

*Manipulation check.* Participants primed with low-status reported having significantly less status ( $M_{Low-status} = 2.79$ , SD = 1.49) than participants primed

with the high-status ( $M_{High-status} = 4.61$ , SD = 1.58; t(82) = 5.34, p < .001), suggesting that the manipulation was successful.

Preference for darker products. A binary logistic regression with status (0 = low-status; 1 = high-status) as independent variable, on choice (0 = low color-value, or black pen; 1 = high color-value, or white pen) revealed a significant main effect of status on choice of product ( $\chi^2(1) = 20.504$ , p < .001, see *Figure 2*), such that participants primed with low-status were significantly more likely to choose the low color-value product than participants primed with high-status (84% vs. 37%). Furthermore, participants primed with low-status chose the low color-value product more than twice as often as those primed with high-status (36 vs. 15). High-status participants tended to choose the high color-value product over the low color-value product, however, a chi-square test revealed that this tendency was only marginally significant ( $\chi^2(1) = 2.95$ , p > .08)

### [INSERT FIGURE 2 HERE]

Darkness as predictor of status. Only 32 participants (42%) thought that the darkness (or lightness) of a color is an indicator of status. A chi-square test showed that this number was not significantly different from 45 (58%), the number of participants who thought the opposite ( $\chi^2(1) = 2.20$ , p > .14). Furthermore, a chi-square test revealed that status does not influence thoughts of color-value as an indicator of status ( $\chi^2(1) = .83$ , p > .36). Thus, although participants primed with status tended to choose the darker pen, they did not consider color-value as a signal of status when explicitly asked for it.

#### Discussion

Overall, these results supported H1, as participants low in status preferred the darker over the lighter option. This effect was attenuated for participants high in status. These results suggested that color-value can serve as a signal for status. Interestingly, they also indicated that respondents did not think of color-value as a signal of status when directly asked about it. This supports the idea that color-value may be just a weak signal of status, which is not effective id salient during status evaluations. In the next study, we provided additional evidence from the field that supports H1.

# STUDY 2: DOES STATUS INFLUENCE CHOICE OF DARK PRODUCTS IN THE MARKETPLACE? EVIDENCE FROM THE FIELD

The purpose of this study was twofold. First, it added field evidence for the relationship between status seeking and preference for lower color-value (darker) products (H1). We collected and analyzed consumers' preferences data for products of different color-value from two online stores: a store selling replicas, and a store selling similar original luxury products. Because individuals buy replica products to project status (Han et al., 2010; Wilcox, Kim, & Sen, 2009), we assumed that replica stores' customers would be seeking status. Because individuals who buy original luxury products tend to be affluent (Han et al., 2010), they do not necessarily seek status (Feltovich, Harbaugh, & To, 2002). Thus, we assumed that original stores' customers would tend to seek for status less.

Second, this study tried to understand if our predictions are novel for companies. Thus, we tested if these two stores arranged their products' portfolio according to our predictions: higher proportion of darker products in the replica store, compared to the original store.

#### Data and Variables

Data sources. The data for this study was collected between January and April, 2017. We choose two popular online stores: a Chinese store selling replicas of handbags, and a North American store that sells expensive, original luxury fashion. We selected two brands: Gucci and Prada, luxury brands that are ranked among the top ten luxury brands in 2016 (Interbrand, 2016).

Variables. We used a designer software to capture the color components of 198 handbags belonging to the selected brands that had one predominant color (98 handbags from the replica store; 100 handbags from the original store). We recorded color-value (from 0%, the darkest, to 100%, the lightest color-value), hue (red, green, blue, and yellow), and chroma (from 0% to 100%). The ranking of each handbag on the bestseller list (e.g., "1" was the best-selling bag), which captures consumer preferences, was our dependent variable.

#### Results

Preference for darker products. If our predictions were correct, we would expect that for the replica store, lower color-value (darker) handbags would tend

to sell more than higher color-value (lighter) ones. However, for the original store this tendency would be attenuated. We conducted a regression on bestseller ranking, including color-value, store (0 = replica; 1 = original), and their interaction as independent variables, and chroma, and three dummy variables for hue as controls. Results revealed main effects of color-value ( $\beta$  = -.22, t (192) = -2.70, p < .01) and store ( $\beta$  = -7.26, t (192) = -1.95, p < .05). Most importantly, these were qualified by a significant interaction effect ( $\beta$  = .55, t (192) = 8.90, p < .001). No other effect was significant. Spotlight analyses revealed that for the replica store, lower color-value handbags were the better-selling ones ( $\beta$  = .25, t (194) = 2.54, p < .02, see *Figure 3*). In contrast, for the original store, color-value did not predict position in the bestseller ranking ( $\beta$  = .08, t (194) = .87, p > .38). These results suggest that, in the marketplace, only individuals seeking status prefer darker products over lighter ones.

#### [INSERT FIGURE 3 HERE]

Darker versus lighter product portfolio. Further analyses showed a non-significant tendency to sell lighter colored products for both the replica and the original stores. 57% of the bags offered in the replica store had color-values greater than 50% ( $\chi^2(1) = 2.00$ , p > .15 see *Figure 4*), and the mean color-value percentage ( $M_{Replica} = 54.93\%$ ) of the products offered was higher than 50% (t(97) = 1.64, p = .10). 53% of the bags offered in the original store had color-values greater than 50% (t(1) = .36, t(1) = .

.63). These results suggest that the offerings for both stores do not differ in terms of color-value.

# [INSERT FIGURE 4 HERE]

#### Discussion

This study showed that in the marketplace individuals seeking status prefer darker products, but individuals who may not seek status seem to not have this preference (H1). Moreover, our findings suggest that stores might not be maximizing the composition of their portfolio of products to attract customers by not considering color-value in their strategy to satisfy consumer seeking status. This supports the importance and relevance of our investigation for the business world and for consumers. Overall, results of Study 1 and 2 suggest that individuals seeking status perceive higher status from low color-value products than from high color-value products. However, the influence of color-value on perceptions of status might happen only when color-value is not salient, as research suggests that the effects of color on perceptions can be implicit (Hoegg & Alba, 2006; Mahnke, 1996). If this was the case, then making color-value salient during status evaluations should attenuate the influence of color-value on perceptions of status. The next study was designed to investigate this possibility.

# STUDY 3: DOES DARKNESS DRIVE PERCEPTIONS OF STATUS? THE MODERATING ROLE OF SALIENCY

In Studies 1 and 2, we found that individuals seeking status prefer low color-value products. In Study 3, our main objective was to demonstrate that low color-value can influence perceptions of status, but only when color-value is not salient. For this reason, we explicitly asked about half of the participants to consider color-value of the products before providing their evaluations of status.

#### Method

Participants. One hundred and thirty-one participants (54 females;  $M_{age} = 35.46$ ) were recruited through Mechanical Turk in exchange for a payment consistent with current suggestions (Goodman & Paolacci, 2017).

Stimuli. We used four pairs of products (i.e., a pair of handbags, a pair of shoulder bags, a pair of scarfs, and a pair of hats), from high-end manufacturers (i.e., Louis Vuitton, Prada, Hermes; see *Figure 1*). Each pair included two versions of the same product: a low color-value and a high color-value version. All pairs contained products that were actually offered by the brand, and were equally priced, of the same material and hue (e.g. black, red, blue), and photographed from the same angle.

Procedure. Participants were randomly assigned to a 2 (color-value: low, vs. high) x 2 (saliency: salient, vs. non-salient) x 4 (product: handbag, shoulder bag, scarf, and hat) mixed model design, with product serving as a within-

participant factor. Participants were presented with either four low color-value products or four high color-value products, in random order. In the salient color-value condition, participants were asked to evaluate these products considering the color-value of the product. In the non-salient color-value condition, there was no mention of color-value. Participants assessed perceptions of status of each product in four questions (adapted from Drèze & Nunes, 2008): "What degree of status would this [assigned product] confer to the person using it?" (1 = low status, 7 = high status); "When you are using the [assigned product] in public, how special would it make you feel? (1 = not special at all, 7 = very special); "How difficult would it be for others to buy this [assigned product]" (1 = not difficult at all, 7 = very difficult); and "If you enter a store wearing this [assigned product], how much attention would you expect to receive in comparison to other people?" (1 = none at all, 7 = a great deal). We averaged the four items ( $\alpha$  = .91) and used the resulting status measure as the dependent variable in our analysis.

#### Results

We conducted a 2 (color-value: low vs. high) x 2 (saliency: salient vs. non-salient) x 4 (product: handbag 1 vs. shoulder bag vs. scarf vs. hat) mixed model ANOVA with repeated measures on the last factor. No main effects were significant. However, a significant interaction between color-value and saliency on perceptions of status emerged (F(1, 127) = 4.09, p < .05, see Figure 5). Pairwise contrasts further revealed that in the non-salient condition, perceived status was higher for low color-value products ( $M_{Low\_color-value} = 4.36$ ) than for high

color-value products ( $M_{High\_color-value} = 3.74$ ; F(1, 217) = 4.55; p < .04). This effect was non-significant for the salient condition ( $M_{Low\_color-value} = 3.84$  vs.  $M_{High\_color-value} = 4.11$ ; F(1, 217) = .55; p = .46). Moreover, perceived status of low color-value products was significantly lower when color-value was salient, than when it was not ( $M_{non\_salient} = 4.36$  vs.  $M_{salient} = 3.84$ ; F(1, 217) = 4.28; p < .04). There were no significant differences between the salient vs. non-salient conditions among high color-value products (F(1, 217) = .55; p = .34).

### [INSERT FIGURE 5 HERE]

#### Discussion

The results of this study suggest that participants perceived darker products as projecting more status than lighter products. Using different products (i.e., handbag, shoulder bag, scarf, hut), and colors (i.e., black, red, blue), this study provided support for H4 since lower color-value in products increased perceptions of status when color-value was not salient during status evaluations. However, this effect is attenuated when color-value is salient. As shown in Study 1, this is because color-value is not considered as a costly signal of status. Having thus provided evidence for the novel effect of color-value on perceptions of status, the next study was designed to investigate the full model that hypothesized that color-value influences preference for low color-value products mediated by perceptions of status, only for individuals seeking status, and when color-value is not salient.

# STUDY 4: THE ROLE OF SALIENCY ON THE EFFECT OF COLOR-VALUE ON PREFERENCE FOR DARKER PRODUCTS

The purpose of this study was to test the full process. We predicted that status seeking and saliency of color-value during status evaluations, interact to affect preferences for products with different color-values, and that this effect is mediated by perceptions of status. For generalizability purposes, we measured, instead of manipulating, chronic tendencies of participants to purchase status products. We also assessed perceptions of status with a different set of relevant dimensions. Finally, we measured status perceptions comparatively, with the light and dark versions of the products as anchors of the scales. This simulated a marketplace context, where consumers often evaluate darker and lighter products presented side-by-side.

#### Method

Participants. Two hundred and twenty-two participants were recruited through Mechanical Turk in exchange for a small payment.

Stimuli. We used two pairs of high-end products (e.g. a pair of handbags, and a pair of scarfs), from high-end manufacturers (i.e., Louis Vuitton, Hermes). Each pair included a low color-value version and a high color-value version of the product, with the same design, same brand, same hue (i.e. red, blue), made of the same material, equally priced, and photographed from the same angle. The only difference was darkness across the pair of products (see *Figure 1*).

*Procedure.* Participants were randomly assigned to a 2 (saliency: salient vs. non-salient) x 2 (product replicate: hat vs. scarf) between-participants design. Saliency of color-value was manipulated as in Study 3. Participants were randomly presented with a pair of either hats or scarfs. Participants were asked to choose which product from the pair they preferred, with the high color-value product or the low color-value product as the low and high anchors, respectively. The presentation of the stimuli was also randomized. Then, they evaluated comparatively their perceptions of status of the products, with the high color-value product and the low color-value product as the low and high anchors of 6-point scales, respectively. To assess perceptions of status we asked which product offered the higher degree of prestige, attention, elegance, and wealthiness. We used the average of these items ( $\alpha$ =.76) as the mediator in our analyses. Participants completed the Status Consumption (Eastman, Goldsmith & Flynn, 1999) in order to capture tendency to purchase status products ( $\alpha$ =.73). Finally, participants answer demographic questions, as well as attention and visual tasks.

#### Results

Preliminary analyses revealed that product replicate (hat vs. scarf) did not interact with any of the other variables to affect preferences or perceptions of status. Thus, following established practice (e.g., Luffarelli, Stamatogiannakis, & Yang, 2018), we pooled data for the two product replicates in our analyses. The conclusions of the analyses reported below did not change if product replicate was included as a separate variable.

*Preference for darker product.* A binary logistic regression with Status Consumption, saliency (0 = non-salient; 1 = salient), and their interaction as independent variables, on choice of product (0 = low color-value; 1 = high color-value) as the dependent variable, revealed a significant effect of Status Consumption ( $\beta$  = .55, t = 2.43, p < .02), and a marginally significant effect of saliency ( $\beta$  = 1.25, t = 1.94, p < .053), qualified by the predicted significant interaction effect between the two on choice ( $\beta$  = -.64, t = -2.41, p < .02; see *Figure 6*). A spotlight analysis 1SD above/below the mean of Status Consumption showed that participants high in Status Consumption were more likely to choose the low (vs. high) color-value product in the non-salient condition than in the salient condition (non-salient = 90%, salient = 71%;  $\beta$  = -1.27, t = -2.14, p < .04). Saliency did not affect the choice of participants low in Status Consumption (non-salient = 64%, salient = 76%;  $\beta$  = .59, t = -2.14, t > .17).

#### [INSERT FIGURE 6 HERE]

Perceptions of status as mediator. A moderated mediation analysis (Process Model 8; Hayes, 2008) tested for the indirect effect of the interaction between Status Consumption and saliency of color-value on choice, via perceptions of status. Status Consumption was the independent variable, saliency (0 = non-salient; 1 = salient) was the moderator, perceptions of status was the mediator, and choice (0 = high color-value; 1 = low color-value) was the dependent variable. Results showed a significant interaction effect between Status Consumption and saliency of color-value on status perceptions ( $\beta$  = -.26,

t = -2.37, p < .02; see *Figure 7*) and subsequently of perceptions of status on choice ( $\beta = 1.75$ , t = 6.47, p < .001). The confidence interval (CI) of this moderated mediation excluded zero (95% CI: -.9878 to -.0035, index = -.46).

Next, we examined conditional indirect effects. In the non-salient condition, participants 1SD above the mean Status Consumption perceived higher status for low color-value products than participants 1SD below the mean Status Consumption (Y- $hat_{High} = 4.59$  vs. Y- $hat_{Low} = 3.95$ ,  $\beta = .22$ , t = 2.63, p < .01). Subsequently, higher perceptions of status led to higher preference for low color-value products ( $\beta = 1.65$ , t = 10.41, p < .0001). In the salient condition, chronic status seeking did not affect perceptions of status (p > .58).

# [INSERT FIGURE 7 HERE]

#### Discussion

This study demonstrated that individuals seeking status perceive high status from low color-value product, and this drives their preference for these products. However, this effect is attenuated when color-value is salient during status evaluations. In this experiment we measured Status Consumption (Eastman, Goldsmith, & Flynn, 1999) instead of priming status seeking motives, extending thus the generalizability of our results. Moreover, our results were observed in a setting where high and low color-value products were presented side-by-side, and evaluated comparatively. This setting is similar to situations that consumers actually face when shopping, thus it adds to the external validity of

our results. In the next study we provided further support for the role of saliency on the relationship between color-value and status.

# STUDY 5: DOES THE INFLUENCE OF COLOR-VALUE ON PERCEPTIONS OF STATUS HOLDS WHEN COLOR-VALUE IS SALIENT?

Studies 3 and 4 showed that individuals seeking status perceive higher status from low color-value products, and this drives their preference for these products, but only when color-value is not salient during status evaluations. In this study, we provided further, indirect, evidence for the effect of color-value on perceptions of status in four different ways. First, we put participants under cognitive load and made color-value salient during evaluations. Effects that are implicit (e.g., when color-value is not salient) hold even when these are made explicit if there are no cognitive resources available (Fitzsimons & Williams, 2000). Thus, if the effect of color-value on perceptions of status persists under cognitive load even when color-value is salient, it would show that its effect on perceptions of status is a product of individuals' implicit considerations. Second, we used a cleaner manipulation of color-value. While in previous studies (Study 1, 3, and 4) we used real products offered in the market, in this study we manipulated color-value and directly controlled for hue and chroma. Third, we examined choice sets with four options. This helped us to increase generalizability, simulating real life choice in which consumers have more than two options to choose from. Finally, we recruited female participants and used a product that was relevant for them (i.e., a handbag), making the choice task more

consequential. All these details added to the internal and external validity of our study.

#### Method

Participants. Three hundred and thirty-three female participants were recruited through Mechanical Turk in exchange for a small payment.

Stimuli. We manipulated the color-value of a real high-end handbag (i.e., Hermes Bolide bag) using a design software. We created four different shades of the same product, with the only difference in color-value of 14% with respect to the one before. This difference was sufficient enough to be noticeable and still credible (see *Figure 1*). Hue and chroma remained constant.

Procedure. Participants were randomly assigned to a 2 (Need for Status: high vs. low) x 2 (cognitive load: high vs. low) between-participants design. First, following an imagination task intended to manipulate Need for Status (NFS; adapted from Griskevicius, Tybur, Van den Bergh, 2010), participants were asked to imagine that they worked at a large and prestigious company, and that they were running for a promotion together with two others. Then, participants in the high-NFS condition read "you are constantly thinking about this promotion as it will allow you to move up in the hierarchy of the company, and obtain higher status relative to your peers". Participants in the low-NFS condition were told that they got the promotion, and read "you have moved up in the hierarchy of the company, and now you have higher status relative to your peers." After this, cognitive load was manipulated as in Fitzsimons and Williams (2000).

Participants in the low cognitive load condition were asked to count until just before they started the next task. However, participants in the high cognitive load condition were asked to count until the next task has finished. In the next task, we asked participants to choose and express their liking among four products that only differ in color-value. Thus, color-value was salient for all participants. Choice and liking were averaged ( $\alpha = .94$ ) and used as measure of preference, our main dependent variable in our analyses. Participants then evaluated perceptions of status of the products using the four items used in Study 3 (e.g., "What degree of status would this bag confer to the person using it?"; 1 = low status, 7 = high status), with the high color-value product and the low color-value product as the low and high anchors, respectively. We used the average of these items ( $\alpha = .67$ ) as the mediator in our analyses. Finally, participants answered two manipulation checks assessing NFS (i.e., "How much did you desire to increase your social status when you were writing about this situation?", "How much desire for prestige did you feel while writing about this situation?") that were averaged for our analyses ( $\alpha = .94$ ).

#### Results

*Manipulation checks.* Participants reported desiring significantly more status in the high-NFS condition ( $M_{High-NFS} = 5.16$ , SD = 1.85) than in the low-NFS condition ( $M_{Low-NFS} = 4.48$ , SD = 1.88; t(331) = 10.77, p = .001), suggesting that the manipulation was successful.

Preference for darker product. We conducted a 2 (NFS: high vs. low) x 2 (cognitive load: high vs. low) ANOVA. No main effects were significant. However, as expected, a significant interaction between NFS and cognitive load on preference (F(1, 329) = 4.60, p < .04; see Figure 8). Pairwise contrasts further revealed that in the high cognitive load condition, participants expressed higher preference for the lower color-value products when they were in the high-NFS condition ( $M_{High-NFS} = 3.07$ ) than in the low-NFS condition ( $M_{Low-NFS} = 2.78$ ; F(1, 329) = 3.84; p = .051). This effect was non-significant in the low cognitive load condition ( $M_{High-NFS} = 2.79$  vs.  $M_{Low-NFS} = 2.97$ ; F(1, 329) = 1.21; p = .27). Moreover, for participants in the high-NFS condition, cognitive load increased their preference for darker products (F(1, 329) = 4.36; p = .07), although this effect was marginally significant. There were no significant differences between the high vs. low cognitive load conditions among participants in the low-NFS condition (F(1, 329) = 1.45; p = .23).

#### [INSERT FIGURE 8 HERE]

Perceptions of status as mediator. A moderated mediation analysis (Process Model 8; Hayes, 2008) tested for the indirect effect of the interaction between NFS and cognitive load on preference, via perceptions of status. NFS (0 = low-NFS, 1 = high-NFS) was the independent variable, cognitive load (0 = low cognitive load; 1 = high cognitive load) was the moderator, perceptions of status was the mediator, and preference (0 = high color-value; 4 = low color-value) was the dependent variable. Results showed a significant interaction effect

between NFS and cognitive load on perceptions of status ( $\beta$  = .39, t = 2.21, p < .03; see *Figure 9*) and subsequently of perceptions of status on preference ( $\beta$  = .73, t = 13.28, p < .0001). The confidence interval (CI) of this moderated mediation excluded zero (95% CI: .0339 to .5555, index = .29).

Next, we examined conditional indirect effects. In the high cognitive load condition, participants high in NFS perceived higher status from the low color-value product than participants in the low-NFS condition ( $M_{high-NFS} = 3.01$  vs.  $M_{Low-NFS} = 2.77$ ; F(1, 329) = 3.84; p = .051). Subsequently, higher perceptions of status led to higher preference for low color-value products (F(1, 174) = 3.97; p < .05). In the low cognitive load condition, NFS did not affect perceptions of status (p = .24).

#### [INSERT FIGURE 9 HERE]

#### Discussion

In this study the difference in color-value of the products was salient for all participants. However, by manipulating cognitive load we could discern if the influence of color-value on perceptions of status was due to saliency. As predicted, only participants seeking status under cognitive load perceived lower color-value products as having higher status, and thus chose lower color-value products. This study was particularly strong as we manipulated color-value and controlled for other elements. In Study 1, we used products with the lowest (i.e., black) versus highest (i.e., white) color-value. In Study 2, we collected data from products with different color-value. In Studies 3 and 4 we used real products

offered in the market, chosen for their similarity in hue and chroma. In this study, color-value was manipulated to include four options in the choice set that only differed in color-value, while hue and chroma were constant. This helped us to increase the generalizability of our findings.

#### **GENERAL DISCUSSION**

When and how does color-value influence perceptions of status and thus preferences? Five studies supported the prediction that low color-value in products can increase the perceptions of status and thus their preference. Findings showed that this effect holds under certain conditions. First, when individuals are seeking status. Second, when color-value is not salient during evaluations. Data collected from the marketplace supported these prediction, and showed that stores are not aware of the effects of color-value on status. This suggested that our research is relevant for companies and for consumers. Four experimental studies gave stronger support for our predictions using different products (i.e. pens, handbags, hats, scarfs), with different designs, and various hues (i.e., black, red, blue), in the form of physical and digital stimuli. In all the studies, we considered pairs of products of the same design that only differed in color-value, so that no other elements (e.g., price) or sensory factors (e.g., material) could influence our predictions. Thus, we ensured our findings are only the result of color-value as a visual element. Studies 1 through 3 established the main hypotheses, while Studies 4 and 5 demonstrate the full process: seeking

status increases perceptions of status of low color-value products, and thus their preference, and that this process happens when color-value is not salient.

Our research contributes to research on conspicuous consumption. Literature on perceptions induced by product visual elements suggests that colorvalue can serve as a status signal as it is associated with power. However, the status signaling literature suggests the opposite given that indicators of status should be costly or difficult to obtain (Connelly et al., 2011; Nelissen & Meijers, 2011; Spence, 1973; Veblen, 1899), and color-value is neiher of them. In our research, we reconcile these two perspectives to argue that color-value is a weak status signal, as it does not enjoy any of the key characteristics of an effective and valid status signal. We then show that despite this, individuals seeking status would consider color-value as a status signal, since they look for status signals (Han et al., 2010). In addition, we show that making salient color-value during status evaluations will likely highlight that color-value does not satisfy the required properties of a status signal (Connelly et al., 2011; Nelissen & Meijers, 2011; Spence, 1973; Veblen, 1899). Thus, the status-signaling effect of low color-value may be discounted in this case. This showed that the influence of color-value on perceptions of status occurs when color-value is not salient during evaluation (Hoegg & Alba, 2006; Mahnke, 1996). Thus, we identified conditions under which even weak status signals can influence perception of status. We focus on colorvalue, responding to a call for more research on this matter (Labrecque, Patrick, & Milne, 2013), but our results suggest that there might be other weak signals of status that still provide value to consumers.

Second, we contribute to the study of the influence of product visual elements on perceptions. Prior research has studied how product visual elements influence consumers' preference (Berlyne, 1971; Hoegg, & Alba, 2006). Colorvalue influences perceptions of weight (Walker, Francis, & Walker, 2010), size (Gundlach & Macoubrey, 1931; Mahnke, 1996), and durability (Hagtvedt, 2014). While these investigations are mostly linked to the physical properties of the product, we study how color-value can also be linked to a conceptual construct such as status, a fundamental human motive. Individuals' well-being, self-esteem, and mental and physical health depend on the status obtained (Anderson, Hildreth, & Howland, 2015). We showed in our investigation that color-value can aid to the obtainment of status.

Our research also offers guidance for managers since the choice of color in products is an important decision and managers seem to not always make the best choices when evaluating color (Gorn, Juang, & Banaji, 1997). Indeed, considering the results of our field study, it seems that not all companies have a product portfolio that can fulfill status needs. Our research proposes how to manage product portfolios considering a simple, yet effective visual element to shape product preference for individuals seeking status: color-value. Specifically, we suggest that companies should use darker shades for products that target individuals seeking to increase their status. Our findings show that the use of color-value for this purpose is independent of other color components such as hue or chroma. Furthermore, our findings have implications on how companies should manage their communications and advertising. Since our studies show that saliency attenuates the effect of color-value on perceptions of status, we

recommend companies to avoid any explicit communication of status-signaling properties. It will not only have negative effects on perceptions of status, but also on preference for products, and thereby potentially on consumer satisfaction.

We acknowledge the limitations of our research. Regarding the empirics, in Study 1 the stimuli used in the choice set were products with the lowest (black) versus higher (white) color-value. In Studies 3 and 4, we chose products based on their similarity in hue and chroma, that were actually offered in the market. These provided advantages since these products reflect a natural context that consumers would face. However, these would not rule out any effect of hue and chroma. This limitation was addressed in Study 5, in which we used not two, but four products in the choice set that were manipulated to differ only in color-value. A second potential limitation is the lack of control for background. Although, we have not found any theoretical indication for any effect of color-value of the background on status or related constructs, background contrast should be studied in future research.

Future research could also consider extending this research by first, examining the effect of low color-value environments on perceptions of status. It might be a useful insight for retail marketing. Similar tests could be done by manipulating color-value in brand logos to see its effect on brand attitude. Second, while our research suggests that low-color value signals low status, in some instances, high status individuals seem to present a tendency to prefer high color-value products. Thus, future studies could investigate when and how high color-value products signal status. For instance, context might create situations in which lighter colors are perceived as of greater value: if a leading designer

implies that lighter colors are associated with higher status, we may expect that the tendency to prefer darker colors reverses for low-status individuals. In fact, we suggest a promising tool for companies: by merely manipulating the colorvalue, they could have better control over their portfolio of products. Finally, findings then indicate that there might be other visual elements that might be weak but still have effects on status perceptions. These findings urge scholars to study product visual attributes that due to their visibility might play a role in status signaling, as it can have important consequences. For example, the shape of a product. Literature suggests that angular shapes evoke perceptions of energy, toughness and strength (Berlyne, 1960), while circular shapes evoke impressions of softness, gentleness and mildness (Jiang, Gorn, Galli, & Chattopadhyay, 2015). It might be that shape can also increase perceptions of status. In summary, our findings can help researchers and managers to comprehend status as a phenomenon, and inspire further research to improve our understanding of the relationships between product visual elements and perceptions of status, and its effects of judgments, and decision making.

#### REFERENCES

- Alexander, K. R., & Shansky, M. S. (1976). Influence of hue, value, and chroma on the perceived heaviness of colors. *Attention, Perception, & Psychophysics, 19*(1), 72-74.
- Amhorst, M. L. D., & Reed, J. (1986). Clothing color value and facial expression:

  Effects on evaluations of female job applicants. *Social Behavior and Personality: An International Journal*, *14*(1), 89-98.
- Anderson, C., Hildreth, J. A. D., & Howland, L. (2015). Is the desire for status a fundamental human motive? A review of the empirical literature.

  \*Psychological Bulletin, 141(3), 574.
- Aslam, M. M. (2006). Are you selling the right colour? A cross-cultural review of colour as a marketing cue. *Journal of Marketing Communications*, *12*(1), 15-30.
- Belk, R. W., Bahn, K. D., & Mayer, R. N. (1982). Developmental recognition of consumption symbolism. *Journal of Consumer Research*, 9(1), 4-17.
- Bellizzi, J. A., Crowley, A. E., & Hasty, R. W. (1983). The effects of color in store design. *Journal of retailing*.
- Berger, J., & Ward, M. (2010). Subtle signals of inconspicuous consumption. *Journal of Consumer Research, 37*(4), 555-569.
- Berlyne, D. E. (1960). Conflict, arousal, and curiosity.

- Berry, C. J. (1994). *The idea of luxury: A conceptual and historical investigation* (Vol. 30): Cambridge University Press.
- Charles, K. K., Hurst, E., & Roussanov, N. (2009). Conspicuous consumption and race. *The Quarterly Journal of Economics*, *124*(2), 425-467.
- Chattopadhyay, A., Gorn, G. J., & Darke, P. (2010). Differences and similarities in hue preferences between Chinese and Caucasians. *Sensory Marketing:*Research on the Sensuality of Products, 219-240.
- Cian, L., Krishna, A., & Elder, R. S. (2014). This logo moves me: Dynamic imagery from static images. *Journal of Marketing Research*, *51*(2), 184-197.
- Connelly, B. L., Certo, S. T., Ireland, R. D., & Reutzel, C. R. (2011). Signaling theory: A review and assessment. *Journal of Management*, *37*(1), 39-67.
- De Bock, T., Pandelaere, M., & Van Kenhove, P. (2013). When colors backfire:

  The impact of color cues on moral judgment. *Journal of Consumer Psychology*, 23(3), 341-348.
- Drèze, X., & Nunes, J. C. (2008). Feeling superior: The impact of loyalty program structure on consumers' perceptions of status. *Journal of Consumer Research*, 35(6), 890-905.
- Dubois, & Ordabayeva, N. (2015). Social Hierarchy, Social Status, and Status

  Consumption. In M. Norton, D. Rucker & C. Lamberton (Eds.), *The*Cambridge Handbook of Consumer Psychology.

- Dubois, D., Rucker, D. D., & Galinsky, A. D. (2010). The accentuation bias:

  Money literally looms larger (and sometimes smaller) to the powerless.

  Social Psychological and Personality Science, 1(3), 199-205.
- Dubois, D., Rucker, D. D., & Galinsky, A. D. (2012). Super size me: product size as a signal of status. *Journal of Consumer Research*, *38*(6), 1047-1062.
- Eastman, J. K., Goldsmith, R. E., & Flynn, L. R. (1999). Status consumption in consumer behavior: Scale development and validation. *Journal of Marketing Theory and Practice*, 41-52.
- Feltovich, N., Harbaugh, R., & To, T. (2002). Too cool for school? Signalling and countersignalling. *RAND Journal of Economics*, 630-649.
- Fitzsimons, G. J., & Williams, P. (2000). Asking questions can change choice behavior: does it do so automatically or effortfully? *Journal of Experimental Psychology: Applied, 6*(3), 195.
- Goodman, J. K., & Paolacci, G. (2017). Crowdsourcing consumer research. *Journal of Consumer Research*, *44*(1), 196-210.
- Gorn, G. J., Chattopadhyay, A., Yi, T., & Dahl, D. W. (1997). Effects of color as an executional cue in advertising: They're in the shade. *Management science*, *43*(10), 1387-1400.
- Gorn, G. J., Jiang, Y., & Johar, G. V. (2008). Babyfaces, trait inferences, and company evaluations in a public relations crisis. *Journal of Consumer Research*, 35(1), 36-49.

- Greenwald, A. G., & Banaji, M. R. (1995). Implicit social cognition: attitudes, self-esteem, and stereotypes. *Psychological review*, *102*(1), 4.
- Greenwald, A. G., McGhee, D. E., & Schwartz, J. L. (1998). Measuring individual differences in implicit cognition: the implicit association test. *Journal of personality and social psychology*, *74*(6), 1464.
- Griskevicius, V., Tybur, J. M., & Van den Bergh, B. (2010). Going green to be seen: Status, reputation, and conspicuous conservation. *Journal of Personality and Social Psychology*, 98(3), 392-404.
- Gundlach, C., & Macoubrey, C. (1931). The effect of color on apparent size. *The American Journal of Psychology, 43*(1), 109-111.
- Hagtvedt, H. (2011). The impact of incomplete typeface logos on perceptions of the firm. *Journal of Marketing*, *75*(4), 86-93.
- Hagtvedt, H. (2014). Dark Is Durable, Light Is Convenient: Color Value Influences
   Perceived Product Attributes. In J. Cotte & S. Wood (Eds.), Advances in
   Consumer Research (Vol. 42, pp. 27-31): Association for
   Consumer Research
- Han, Y. J., Nunes, J. C., & Drèze, X. (2010). Signaling status with luxury goods: the role of brand prominence. *Journal of Marketing*, *74*(4), 15-30.
- Hayes, A. F. (2008). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*: Guilford Press.

- Hoegg, J., & Alba, J. W. (2006). Taste perception: more than meets the tongue. *Journal of Consumer Research*, 33(4), 490-498.
- Hoegg, J., Alba, J. W., & Dahl, D. W. (2010). The good, the bad, and the ugly:

  Influence of aesthetics on product feature judgments. *Journal of Consumer Psychology*, 20(4), 419-430.
- Interbrand (2017), "Interbrand Best Global Brands 2017 Ranking." Retrieved on September 05, 2018 https://www.interbrand.com/best-brands/best-global-brands/2017/ranking/
- Jiang, Y., Gorn, G. J., Galli, M., & Chattopadhyay, A. (2015). Does your company have the right logo? How and why circular-and angular-logo shapes influence brand attribute judgments. *Journal of Consumer Research*, 42(5), 709-726.
- Labrecque, L. I., Patrick, V. M., & Milne, G. R. (2013). The marketers' prismatic palette: A review of color research and future directions. *Psychology & Marketing*, 30(2), 187-202.
- Levy, S. J. (1959). Symbols for sale. Harvard business review, 37(4), 117-124.
- Luffarelli, J., Stamatogiannakis, A., & Yang, H. (2018). The visual asymmetry Eeffect: An interplay of logo design and brand personality on brand equity. *Journal of Marketing Research*.

- Magee, J. C., & Galinsky, A. D. (2008). Social Hierarchy: The Self-Reinforcing Nature of Power and Status. *Academy of Management annals*, *2*(1), 351-398.
- Mahnke, F. H. (1996). Color, environment, and human response: an interdisciplinary understanding of color and its use as a beneficial element in the design of the architectural environment. John Wiley & Sons.
- Nakatani, K. (1989). Fixed set in the perception of size in relation to lightness. Perceptual and Motor Skills, 68(2), 415-422.
- Nelissen, R. M. A., & Meijers, M. H. C. (2011). Social benefits of luxury brands as costly signals of wealth and status. *Evolution and Human Behavior*, 32(5), 343-355.
- Ridgeway, C. L., & Walker, H. A. (1995). Status structures. *Sociological Perspectives on Social Psychology*, 281-310.
- Rucker, D. D., Dubois, D., & Galinsky, A. D. (2011). Generous paupers and stingy princes: power drives consumer spending on self versus others. *Journal of Consumer Research*, 37(6), 1015-1029.
- Rucker, D. D., & Galinsky, A. D. (2008). Desire to Acquire: Powerlessness and Compensatory Consumption. [10.1086/588569]. *Journal of Consumer Research*, 35(2), 257-267.

- Rucker, D. D., Galinsky, A. D., & Dubois, D. (2012). Power and consumer behavior: How power shapes who and what consumers value. *Journal of Consumer Psychology*, 22(3), 352-368.
- Spence, M. (1973). Job market signaling. *The Quarterly Journal of Economics*, 87(3), 355-374.
- Valdez, P., & Mehrabian, A. (1994). Effects of color on emotions. *Journal of Experimental Psychology: General, 123*(4), 394.
- Van Rompay, T. J. L., Pruyn, A. T. H., & Tieke, P. (2009). Symbolic meaning integration in design and its influence on product and brand evaluation.

  International Journal of Design, 3(2).
- Veblen, T. (1899). The theory of the leisure class. New York: The New American Library.
- Walker, P., Francis, B. J., & Walker, L. (2010). The brightness-weight illusion. *Experimental psychology*.
- Wilcox, K., Kim, H. M., & Sen, S. (2009). Why do consumers buy counterfeit luxury brands? *Journal of Marketing Research*, *46*(2), 247-259.
- Wong, J., & Shavitt, S. (2010). Be rude to me and I will buy a rolex: Effects of culture orientation on responses to power threat in a service setting.

  \*Advances in Consumer Psychology, 2, 95.

# FIGURE 1 PICTURES OF PRODUCTS USED AS EXPERIMENTAL STIMULI

Low color-value version of the same product is on the left, high color-value version on the right

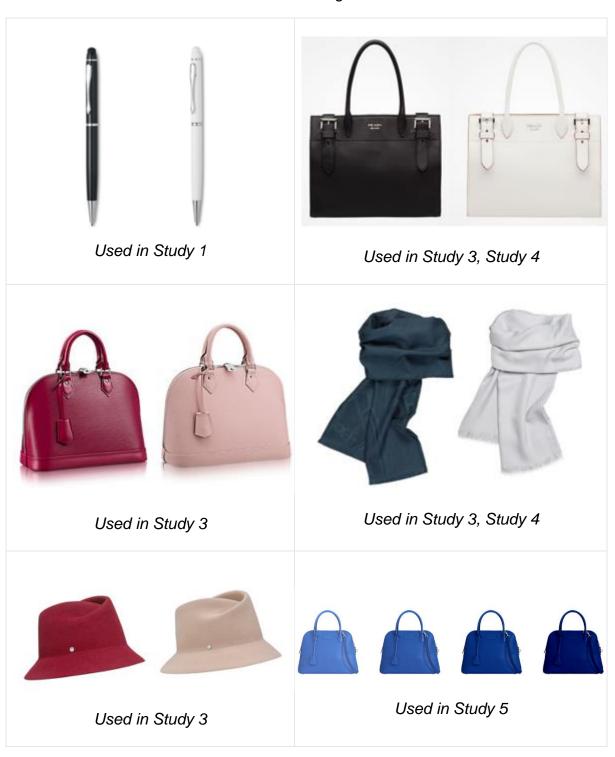


FIGURE 2

EFFECT OF STATUS ON CHOICE OF COLOR-VALUE PRODUCT

(STUDY 1)

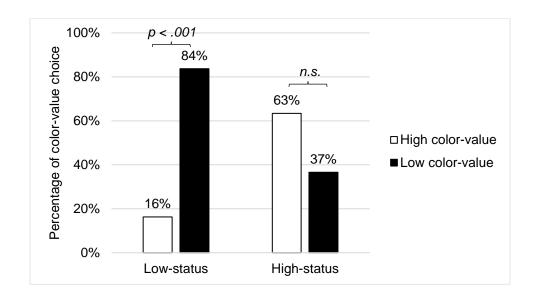


FIGURE 3

PREFERENCE FOR COLOR-VALUE PRODUCTS PER STORE (STUDY 2)

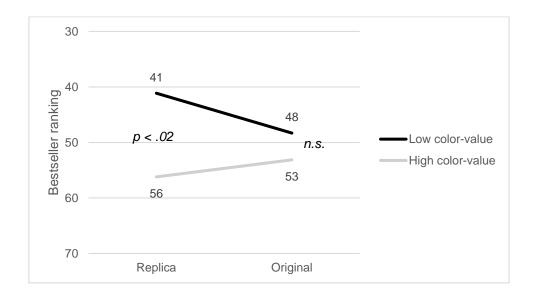
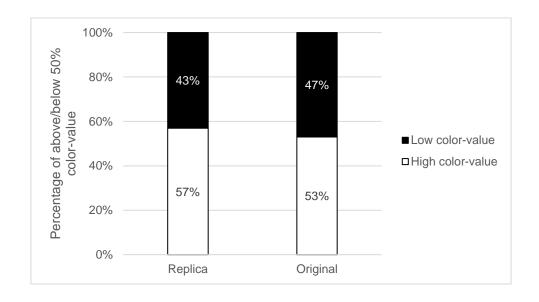
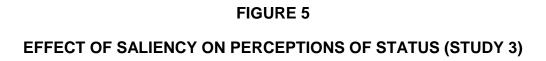


FIGURE 4

DISTRIBUTION OF LOW VERSUS HIGH COLOR-VALUE PRODUCT
PORTFOLIO PER STORE (STUDY 2)





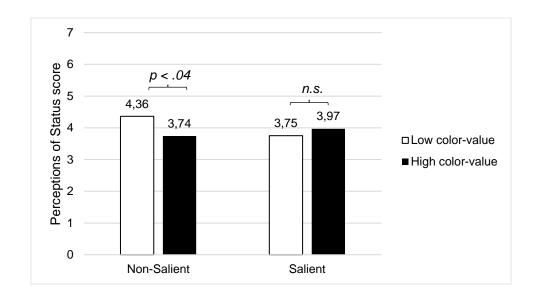
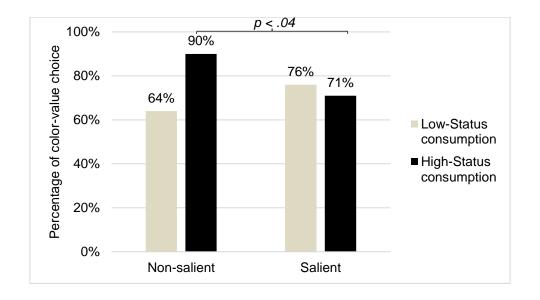


FIGURE 6
EFFECT OF STATUS ON CHOICE OF COLOR-VALUE PRODUCT
(STUDY 4)



#### FIGURE 7

# EFFECT OF STATUS ON CHOICE OF COLOR-VALUE PRODUCT MODERATED BY SALIENCY AND MEDIATED BY PERCEPTIONS OF STATUS (STUDY 4)

(Index of Moderated Mediation 95% CI: .0968 to .7029)

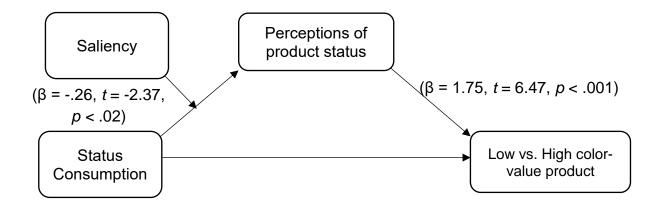


FIGURE 8

EFFECT OF STATUS ON PREFERENCE OF COLOR-VALUE PRODUCT
MODERATED BY COGNITIVE LOAD (STUDY 5)

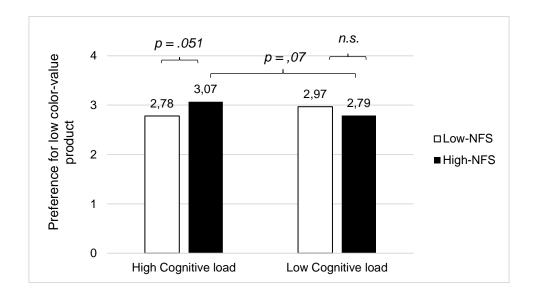


FIGURE 9

# EFFECT OF STATUS ON PREFERENCE OF COLOR-VALUE PRODUCT MODERATED BY COGNITIVE LOAD AND MEDIATED BY PERCEPTIONS OF STATUS (STUDY 5)

(Index of Moderated Mediation 95% CI: .0425 to .5563)

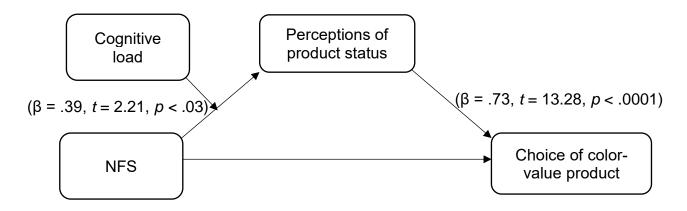


TABLE 1
SUMMARY OF STATISTICAL RESULTS

Study 1									
1. DV: Position in bestseller ranking									
Predictor		β	Lower CI	Upper CI					
Color-value		22 (.07) 26 (3.70)	38	06					
Store			-14.57	.04					
Color-value x Store*		55 (.06)	.43	.67					
Hue (Red)		9 (3.99)	-8.55	7.18					
Hue (Green)		9 (5.45)	-14.58	6.92					
Chroma	.00	01 (.07)	13	.16					
Study 2									
1	-		r-value, 1: low color	-					
Predict		β	Lower CI	Upper CI					
Status***	-2.1	19 (.525)	.04	.31					
Study 3	2 Contrasts ii	n Percention	ns of status per con	dition					
Conditions	Mean - Perce	•	-	difference					
Conditions	statu	•	Of for the	difference					
Non- salient*	Low color- value	4.36	Lower CI	Upper CI					
	High color- value	3.74	.044	1.19					
Oalland	Low color- value	3.84	Lower CI	Upper CI					
Salient	High color- value	4.11	803	.365					
Low color-	Non-salient	4.36	Lower CI	Upper CI					
value*	Salient	3.84	.026	1.19					
High color-	Non-salient	3.74	Lower CI	Upper CI					
value	Salient	4.11	804	.347					
Study 4  1. DV: Perceptions of status (1 to 7)									
Conditi		В	Lower CI	Upper CI					
Salient con of color-value		.27 (.88)	340	.889					
Status consu	ımption***	.22 (.08)	.006	.385					
Salient con of color-value	sideration - e x Status	.26 (.11)	475	043					
Consumption	1								

#### 2. Spotlight analysis: Choice likelihood of low color-value product at high/low Status consumption Salient Effect of Salient consideration of colorconsideration of value on Status consumption (+/-1SD) color-value Non-Salient Lower CI Upper CI β Salient **High-Status** 76% 90% -1.26 (.52) -2.43 -.11 consumption\* **Low-Status** 64% 76% .59 (.43) -.26 1.44 consumption

## 3. Dependent variable model - DV: Choice (0: High color-value, 1: Low color-value)

1 31.31 5)							
Predictor	β	Lower CI	Upper CI				
Perceptions of status***	1.76 (.27)	1.23	2.29				
อเลเนอ							

### 4. Conditional indirect effect of Perceptions of status on choice at values of Salient considerations of color-value

Salient considerations of color-value							
Mediator	Status	β	Lower CI	Upper CI			
	Consumption						
Perceptions of status ***	Non-Salient	.39 (.16)	.10	.70			
Perceptions of status	Salient	07 (.20)	47	.30			

<sup>\*</sup>  $p \le .05$ , \*\*  $p \le .01$ , \*\*\*  $p \le .001$ . Standard errors are shown in parentheses next to coefficient estimates

#### **CHAPTER IV**

## "FINISHING UP" OR "HOLDING OUT" UNTIL THE LAST DROP? EFFECTS OF PRODUCT LEVEL ON MOTIVATION TO CONSUME

People usually buy products for the benefits these bring through consumption (Holbrook & Hirschman, 1982; Nowlis, Mandel, & McCabe, 2004; Van Osselaer et al., 2005; Wang, Novemsky, & Dhar, 2009). As a consequence, we might find consumers finishing a one-month beauty treatment until the last drop. However, we might also find consumers holding out until the last drop of a perfume they really like. A pilot study conducted with 66 participants found that 98% of the respondents have finished products until the last drop. However, a surprising 96% of respondents also said that they have products which they have used for some time, but now they rarely or never use them although they claim they still like the products. Then, when and why people would be motivated to keep consuming a product or to conserve what is left, as product level decreases? In this paper, we identify conditions under which motivation to consume increases versus decreases depending on the current product level (i.e. the amount of product quantity left in a package).

We propose that whether consumers are motivated to consume or to conserve a product as product level decreases, depends on how the product delivers its benefits. We distinguish between products that deliver their benefits "upon finishing" or "as you go". The first category of "upon finishing" products refers to products that provide the bulk of their benefits once consumers finish the product. People have to finish the product to experience the full benefits of

the product: e.g. a face beauty product that improves the skin look after a two-weeks treatment. The second category of "as you go" products refers to products that provide their benefits with every use. People experience the benefits of the product after each usage: e.g. a face beauty product that improves the skin look with each usage.

We argue that although consumers may acquire a product with the purpose to obtain its benefits, these products might be construed differently, depending on how the product delivers its benefits. When consuming a product, people face a trade-off between pursuing a goal (e.g., improve the skin look) and diminishing a resource (i.e., using a beauty product). While the achievement of goals generates benefits, obtaining the benefit often also requires the depletion of resources. Building on the established distinction between goals and resources (Dhar & Simonson, 1999), we propose that when product benefits are delivered "upon finishing", people are more likely to represent consumption of the product as "serving a goal". This is because they emphasize and thus make salient the successful attainment of the final goal, i.e. its benefits at the end of the consumption process. Following the goal-gradient hypothesis that posits that motivation to reach a goal increases with the proximity to the goal (Hull, 1932; Kivetz, Urminsky, & Zheng, 2006), motivation to consume products that deliver their benefits "upon finishing" should increase towards the end of the consumption process (i.e., when product level is low). Consumers will consider the contribution of each consumption occasion as an advancement to the attainment of the full benefits of the product.

Conversely, when products deliver their benefits "as you go", we argue that people are more likely to represent consumption of the product as "consuming a resource". This is because they emphasize and thus make salient the achievement of benefits after each usage. In that sense, motivation to consume "as you go" products would violate the goal-gradient hypothesis. We argue and demonstrate that motivation to consume products that deliver their benefits "as you go" does not increase, but decrease towards the end of the consumption process (i.e., when the product level is low). The underlying logic we offer suggests that consumers will consider each additional consumption occasion a loss to the future attainment of additional benefits of the product. This shift in emphasis compared to "upon finishing" products, will increase the desire to conserve resources and to prolong the potential attainment of benefits from them.

Our research offers important theoretical contributions. First, we contribute to research on post-purchase consumption by theorizing and testing the decline of motivation to consume and subsequent consumption in connection with product level. Until now, research on this matter has studied situations in which consumers are dissatisfied with the product benefits and thus motivation to consume decreases (Richins & Bloch, 1991; Bolton & Lemon, 1999; Prins, Verhoef, & Franses, 2009; Rogers, 2003). However, that might not always be the case. Indeed, in many cases product benefits are delivered following a different, positive trajectory and might even be perceived to intensify towards the end. We therefore study the novel, yet common situation in which the product provides confirmed value to consumers during consumption, but still motivation to

consume declines as a function of product level. To the best of our knowledge, this relevant setting, affecting millions of consumers every day (Solovitch, 2016), has not received much attention, but would help us to provide significant advances to our understanding of consumer behavior.

Second, we contribute to research on consumers' motivation. One of the main motives why people buy products is to enjoy their benefits through consumption (Van Osselaer et al., 2005). Moreover, research in intertemporal distribution of consumption posits that consumers prefer immediate gratification (O'Donoghue & Rabin, 1999). However, we propose and demonstrate that motivation to consume can change as a result of the ongoing consumption process itself. We show that product level can influence motivation to consume. Our empirical results complement studies that have looked at the influence of various product related factors (e.g., package size) as well as context related factors (e.g. stockpiling) on how much product an individual consumes (Ailawadi & Neslin, 1998; Chandon & Wansink, 2002; de Castro & Brewer, 1992; Wansink, 1996; Wansink & Van Ittersum, 2003).

Third, we add to research investigating the effects of limiting resources on consumption (Brock, 1968; Folkes et al., 1993; Lynn, 1991; Snyder, 1992; Worchel et al., 1975), by demonstrating that product level interacts with how products deliver benefits to influence motivation to consume. In other words, we consider product level as much a result of consumption, as an influence on consumption. This allows us to show that how and when a product delivers its benefits moderates the effect of product level on motivation to consume.

In the remainder of this essay, we first discuss the relevant literature and build on it to develop our arguments. We then continue to hypothesize how product level interacts with how products deliver their benefits to influence the motivation to consume products. Then, we introduce and present the results of three studies designed to test our hypotheses. Finally, we conclude by discussing the theoretical and practical implications of our research.

#### **CONCEPTUAL BACKGROUND**

Previous research suggests that some external and product related factors influence how people consume products: for instance, stockpiling can make people consume at a faster rate (Chandon, & Wansink, 2002), larger portion sizes increase the amount of food intake (Raynor, & Wing, 2007), and smaller package formats reduces the likelihood to consume (Coelho Do Vale, Pieters, & Zeelenberg, 2008). In this research we focus on studying the effects of product level on motivation to consume. We define *product level* as the amount of product left in a product package at the moment of consumption, which can go from full to empty. To the best of our knowledge, the study of this factor has not received much attention despite existing evidence of its impact on consumer behavior (Folkes, Martin, & Gupta, 1993; Worchel, Lee, & Adewole, 1975). In this section, we review existing research on the effects of product level to propose that product level together with how product benefits are delivered, can influence motivation to consume products.

#### Consumer responses to product level

In one of the first studies to investigate the influence of product level on consumer behavior, Worchel and colleagues (1975) conducted a purported product tasting task and exposed participants to a translucent jar containing either two or ten cookies. After tasting the cookies, participants wanted to eat more of the cookies when they saw the jar almost empty compared to almost full. In another study, Folkes, Martin and Gupta (1993) found that participants tended to decrease the amount of a cleaning product (e.g., toilet cleaner, detergent) they used, as product level decreased. These opposing results suggest that product level might interact with other elements to affect motivation to consume.

While the amount of product consumed in a single occasion can be linked to alternations in the motivation to consume, it is important to highlight that in these studies, ownership was not part of the design, and participants did not have the product available for later usage. Yet, we know that an important theoretical concept affecting consumption is the real or perceived level of ownership (Reb & Connolly, 2007). Studies have shown that the effects of ownership differ from the effects caused by the mere rights of usage (Morewedge, Shu, Gilbert, & Wilson, 2009). Our study focuses on products that are owned and available for repeated consumption. Second, while Worchel and colleagues (1975) tested their predictions using pleasurable products (i.e., cookies), Folkes and colleagues (1993) used functional products (i.e., toilet cleaner). Due to their utilitarian nature, consumers should use these products as they have a functional need to attend independently of elements such as product level (Hirschman & Holbrook, 1982). Thus, consumers will find it difficult to decide to not use a utilitarian product even

if it is almost empty. Instead, if they are considering a product that cannot easily be replaced, they might prefer to save it for later. Moreover, previous studies do not focus on benefits that are positively delivered. As in our investigation, there are many products available that deliver benefits "upon finishing" and "as you go". In the following paragraphs, we detail the relevant research regarding product benefits.

#### The role of product benefits in motivation to consume

Product benefits can influence motivation to consume a product over time. Research in consumer behavior has shown that motivation to consume a product decreases if the associated benefits of this product disappear. For instance, previous research found that people will discontinue using a product when its performance results unsatisfactory (Bolton & Lemon, 1999; Richins & Bloch, 1991), or when the product is highly aesthetic (Wu & colleagues, 2017). Conversely, studies have also shown that people will engage in additional consumption to compensate for a product that is perceived as not effective (Lin & Chang, 2012). Common to these studies is that consumers enjoy consumption differently (or no longer) once the consumption process started, either because they have additional information, or because they have new perceptions of the product.

Findings to date then imply that consumers consider product benefits during consumption (i.e., if these disappear, or are lost), that these benefits can impact on consumers' motivation (i.e., dissatisfaction, or decrease in usage), and

that this motivation can change during consumption (i.e., starting with high motivation, ending with low motivation). Given the effects of product benefits before and during consumption, it is necessary to take a finer perspective on how products deliver their benefits. We distinguish between products that deliver their benefits "upon finishing" or "as you go". In the first category, people have to finish the product to experience the full benefits of the product. For example, "Gatorade Prime Energy Chews" belong to this category. This is a product that comes in a pack of 6 chews. Retailers recommend eating all 6 chews prior to any physical activity to boost energy and prepare body muscles for action (Gatorade Website, 2018). It is important that all six chews are consumed, because only together, and eaten in close intervals, will this product deliver its optimum benefit. The benefits of this product will therefore be delivered "upon finishing" the package. A second category are products that provide their benefits every time consumers use them. People can experience the benefits of the product in each consumption event. For example, "Gatorade Thirst Quencher" belongs to this category. A drink that comes in a bottle of 20oz, and promises to refuel energy during training (Gatorade Website, 2018). The benefits of this product will be delivered "as you go", with every sip you quench your thirst. While drinking more presumably quenches larger amounts of thirst, in contrast to the energy chews, the final sip quenches as much thirst as the first, relative to its size.

In light of the existing literature, the identified gaps, and our proposed differentiation to include types of products that deliver their benefits either "upon finishing" or "as you go", in this article, we predict that motivation to consume products will follow different paths depending on the interaction between product

level and how the product delivers its benefits. In the next section, we discuss our predictions.

#### Motivation as a result of product level and product benefits

Goals are mental representations of desired end states (Fishbach & Ferguson, 2007; Kruglanski et al., 2002; Locke & Latham, 1990, 1994). Setting a goal motivates people and makes them strive harder to accomplish their tasks (Gollwitzer, 1990; Locke & Latham, 1990). However, in consumption there is a trade-off between pursuing a goal i.e., achieving the benefits, and spending a resource, i.e., the product itself (Dhar & Simonson, 1999). The achievement of consumption goals generates utility, but pursuing consumption goals also implies consuming, and hence requires spending the resource during consumption. As both ways of looking at consumption are two sides of the same coin, people will either choose to emphasize the pursuit of a goal or the consumption of a resource. Building on this distinction, we propose that when people are consuming a product they will tend to predominantly represent consumption of the product either as "serving a goal" or as "consuming a resource".

Products can be seen as goal providers. We propose that when product benefits are delivered "upon finishing," people are more likely to represent consumption of the product as "serving a goal" as these products emphasize and thus make salient the successful attainment of the product benefits at the end of the consumption process. This saliency of the product benefits would selectively draw attention to the goal at the end of the process. People purchase a product

that provides their full benefits "upon finishing" knowing that the goal will be reached when the product usage is entirely completed, i.e. the product is finished. Every unit of "usage" (i.e., every application of a beauty treatment, every chew of a pack of energy chews, or every dose of a vitamin supplement) will reduce the distance to the goal, which results from the benefits the product delivers. People will evaluate each usage in terms of its contribution to the attainment of the final goal. The more instrumental the means are, the more consumers increase their efforts to reach the end state (Kivetz, Urminsky, & Zheng, 2006). Thus, when people construe their consumption experience as pursuing a goal, their motivation should follow an increasing pattern as a function of consumption level, that is, parallel to the goal-gradient hypothesis (Hull, 1932; Kivetz, Urminsky and Zheng, 2006). This is because the proportional contribution of each additional action appears larger as consumers progress toward the goal (Koo & Fishbach 2008; Wallace & Etkin 2018).

As a result, the more the consumer progresses in their path to get the benefits of the product, the higher the motivation to fulfill it. Thus, we hypothesize:

**H1:** When the product benefits are delivered "upon finishing", people's motivation to consume the product increases as product level decreases. That is, people's motivation to consume the product is greater when the product is almost empty versus almost full.

**H2:** The increase in motivation for product that deliver benefits "upon finishing" products when product level decreases, will be mediated by

perceptions of contribution of each usage occasion to the attainment of product benefits.

Products can also be seen as the source of a benefit: a resource. We sustain that when a product benefit is delivered "as you go," people will be more likely to represent consumption of the product as "consuming a resource". Products that provide their benefits "as you go" emphasize and thus make salient the achievement of benefits after each usage. People do not need to complete the consumption process to receive the full benefits, since each usage occasion is independent. Thus, it is more likely that consumers will perceive these products as "consuming a resource". Moreover, research suggests that resources need to be managed to contribute to their availability in the future (Dhar and Simonson, 1999). Indeed, people will be motivated to retain, and protect resources when these are limited, depletable or depreciable, valuable (Brock, 1968; Hobfoll, 2002), and useful in the future (Griskevicius, Tybur, Delton, & Robertson, 2011; Muraven, Shmueli, & Burkley, 2006). If the consumption of products that deliver their benefits "as you go" is perceived as "consuming a resource", consumers should increase their desires to conserve it as it gets limited, and because it is valuable and useful in the future. Consumers will consider each additional consumption occasion a loss to the future attainment of additional benefits of the product. Thus, when people construe their consumption experience as "consuming resources", towards the visibly obvious end of a consumption process, motivation to consume these products will violate the positive trajectory proposed by the goal-gradient hypothesis. In this case, motivation to consume should decrease as product level decreases. This is because individuals will have

an increasing desire to conserve a product when they perceive it to be approaching its end and hence the end of the continuous benefits it has provided them.

# We hypothesize:

**H3:** When the product benefits are delivered "as you go", people's motivation to consume the product will decrease as product level decreases. That is, people's motivation to consume the product is lower when the product is almost empty versus almost full.

**H4:** The decrease in motivation for "as you go" products when product level decreases, will be mediated by resource conservation that will emerge in consumers.

#### **OVERVIEW OF STUDIES**

We aim to understand the role of product level on motivation to consume a product, depending on how this product delivers its benefits: "upon finishing" or as "you go". We tested our hypotheses in three studies. Study 1 showed that motivation to consume an "upon finishing" product increases while product level decreases. However, the motivation to consume an "as you go" product decreases while product level decreases. Study 2 replicated results from the first study with products delivering different benefits and provided initial tests for the mechanism behind the decrease in motivation to consume for products that deliver their benefits "as you go". Finally, Study 3 tested the full model. In this study we investigated further the mediating process for products that deliver their

benefits "upon finishing" or "as you go". Across these experimental studies, we manipulated product level as either almost full (approximately at ¾ of its full capacity; see *Figure 1*) or almost empty (approximately at ¼ of its full capacity) and replicated results with different products and benefits (e.g., straightening hair shampoo, hair thickening tonic, face brightening oil).

#### STUDY 1: DOES PRODUCT LEVEL AFFECT MOTIVATION TO CONSUME?

This study tested the effect of product level together with how a product delivers its benefit, on the motivation to consume (H1, H3). Overall, we predicted that motivation to consume "upon finishing" products will be higher when the product is almost empty than when is almost full. However, motivation to consume "as you go" products will be lower when the product is almost empty than when is almost full.

# Method

Participants. Three-hundred and nighty five participants (58.5% female;  $M_{age} = 37.56$ ) were recruited through Mechanical Turk in exchange for a payment consistent with current suggestions (Goodman & Paolacci, 2017).

Procedure. Participants were randomly assigned to one of four conditions in a 2 (product level: almost full vs. almost empty) by 2 (product benefit: "upon finishing" vs. "as you go") between-subjects design. Participants were asked to read a description of a straightening hair shampoo. For the "upon finishing" condition, participants read that this shampoo had to be used 30 times to observe the effect, and after finishing one bottle, consumers will have an amazing straight

and smooth hair. For the "as you go" condition, participants read that after every time this shampoo is used, they will see that their hair is little by little getting more straight and smoother. After that, participants were asked to imagine that the shampoo was theirs, and that they have been using it. Then, they were presented with the picture of the shampoo that was either almost full (approximately at  $\frac{3}{4}$  of its full capacity) or almost empty (approximately at  $\frac{1}{4}$  of its full capacity; see *Figure 1*), depending on the condition. Considering this situation, participants completed a set of questions asking for their motivation to consume the shampoo (i.e., "how eager are you to use this shampoo?", "how motivated are you to use this shampoo?", "how much do you want to use this shampoo?"; from 1 to 7, very little to very much). We averaged the three items ( $\alpha = .95$ ) and used the result measure as our dependent variable: motivation to consume.

### Results

Product benefit as a moderator for motivation to consume. A product level x product benefit ANOVA of motivation to consume the product yielded no significant main effects of time of product benefit (F(1, 391) = 0.23; p = .63) or product level (F(1, 391) = 1.45; p = .23). However, as predicted the ANOVA yielded a significant interaction of product level x product benefit (F(1, 391) = 29.59, p < .001; see Figure 2) on motivation to consume. Planned contrasts revealed that for the product that delivers its benefits "upon finishing", motivation to consume was significantly higher when it was almost empty (M = 5.99) than when it was almost full (M = 5.11; F(1, 391) = 20.75; p < .001). However, for the

product that delivers its benefits "as you go", motivation to consume was significantly lower when it was almost empty (M = 5.33) than when it was almost full (M = 5.90; F(1,391) = 9.58; p < .002).

# [INSERT FIGURE 2 HERE]

#### Discussion

Our theory posits that how products deliver their benefits moderates the effect of product level on motivation to consume. For products that deliver their benefits "upon finishing", motivation to consume would increase while the consumption process is finishing. However, for products that deliver their benefits "as you go", motivation to consume would decrease while product level decreases. Overall, the results of this study provided initial support for our hypotheses (H1, H3). The next study was designed to investigate this further, and the mechanism behind the decrease in motivation for products that deliver their benefits "as you go". We believe this effect will be mediated by resource conservation desires that will emerge in consumers.

# STUDY 2: THE EFFECT OF PRODUCT LEVEL ON MOTIVATION TO CONSUME, MEDIATED BY RESOURCE CONSERVATION

Study 1 tested our main prediction: the interaction between product level and how the product delivers its benefit, on the motivation to consume a product. In Study 2 we sought to provide additional evidence to our main prediction using

a different product (i.e., a hair thickening tonic). In addition, we aimed to understand if participants increase their desire to conserve resources once the product that delivers its benefits "as you go" is almost empty.

#### Method

Participants. Two-hundred and sixty-one participants (52.1% female;  $M_{age}$  = 37.89) were recruited through Mechanical Turk in exchange for a small payment.

*Procedure.* Participants were randomly assigned to one of four conditions in a 2 (product level: almost full vs. almost empty) by 2 (product benefit: "upon finishing" vs. "as you go") between-subjects design. Participants were asked to read the description of a hair thickening tonic. For the "upon finishing" condition, participants read that to observe the effect of the hair tonic, they had to finish the entire bottle. For the "as you go" condition, participants read that they will see a gradual effect after each usage. Following a similar procedure as in Study 1, participants were presented with the picture of the hair tonic that was either almost full or almost empty (see *Figure 1*). After this, participants completed questions asking for their motivation to consume the hair tonic, using the same three items ( $\alpha = .97$ ) from Study 1. We also asked participants "how motivated do you feel to preserve the amount of tonic left in the bottle?" and "how much do you want to save the hair tonic for later?", to test their resource conservation desires ( $\alpha = .92$ ) as our mediator.

#### Results

Product benefit as a moderator for motivation to consume. A product level x product benefit ANOVA of motivation to consume yielded a significant main effect of product benefit (F(1, 257) = 4.35; p = .04), and a non-significant effect of product level (F(1, 257) = 1.53; p = .22) on motivation to consume the product. In support for our hypotheses, the ANOVA yielded the predicted product level x product benefit interaction (F(1, 257) = 9.30, p < .003; see Figure 3). Planned contrasts revealed that for the product that delivers its benefits "as you go", motivation to consume was significantly lower when it was almost empty (M = 4.78) than when it was almost full (M = 5.59; F(1, 257) = 8.76; p < .003). For the product that delivers its benefits "upon finishing", motivation to consume was higher when it was almost empty (M = 5.76) than when it was almost full (M = 5.41; F(1, 257) = 0.43; p = .19). However, this effect was not significant.

### [INSERT FIGURE 3 HERE]

Resource conservation as mediator. A moderated mediation analysis (Process Model 8; Hayes, 2008) testing if resource conservation desires mediates the interaction effect between product level and product benefit on motivation to consume. Results showed a significant interaction effect between product level and product benefit on resource conservation ( $\beta$  = -1.00, t = -2.55, p = .01; see Figure 4) and a subsequent significant effect of resource conservation on motivation to consume the product ( $\beta$  = -.37, t = -6.51, p < .001).

The confidence interval (CI) of this moderated mediation excluded zero (95% CI: .113 to .708, index = .37).

# [INSERT FIGURE 4 HERE]

Next, we examined conditional indirect effects. As predicted, the CI of the indirect effect for the product that delivered its benefits "as you go" excluded zero (95% CI: 0.153 to .634; see *Figure 5*). Specifically, participants expressed higher resource conservation desires when it was almost empty than when it was almost full ( $M_{AlmostEmpty} = 4.24$  vs.  $M_{AlmostFull} = 3.29$ ;  $\beta = -.95$ , t (257) = -3.36, p < .001). Then, higher resource conservation desires resulted in a lower motivation to consume ( $\beta = -.52$ , t (124) = -6.79, p < .001). For the product that delivers benefits "upon finishing", product level did not affect resource conservation desires (p > .86).

# [INSERT FIGURE 5 HERE]

#### Discussion

These results provide additional support to H1 and H3 with a different product. As argued earlier, this study showed that for products that deliver their benefits "as you go", participants had higher resource conservation desires when the product is almost empty than when it is full. Subsequently, higher resource conservation desires decreased motivation to consume. In addition, we theorize that for products that deliver their benefits "upon finishing", participants will

express higher perceptions of contribution of each usage to the final goal occasion when the product is almost empty than when it is full, and these perceptions will increase motivation to consume. We explore this next.

# STUDY 3: THE EFFECT OF PRODUCT LEVEL ON MOTIVATION TO CONSUME, MEDIATED BY PERCEPTIONS OF CONTRIBUTION TO THE FINAL GOAL AND RESOURCE CONSERVATION

The purpose of this study was to test the full process: the interaction between product level and product benefit, on the motivation to consume a product. This study provided additional evidence to our main prediction using a different product (i.e., face brightening oil). In addition, we aimed to understand if the mechanism behind the increase in motivation to consume for products that deliver their benefits "upon finishing", and the decrease in motivation to consume for "as you go" products.

#### Method

*Participants*. Two-hundred and ninety-nine female participants ( $M_{age}$  = 35.81) were recruited through Mechanical Turk in exchange for a small payment.

Procedure. Participants were randomly assigned to one of four conditions in a 2 (product level: almost full vs. almost empty) by 2 (product benefit: "upon finishing" vs. "as you go") between-subjects design. Participants were asked to read a description of face brightening oil. For the "upon finishing" condition,

participants were presented with a product called "BrightUp at the End™". They read that this was a face brightening oil designed to improve the skin look by the time one finishes the entire bottle. For the "as you go" condition, participants were presented with a product called "BrightUp Gradually™". They read that this was a face brightening oil designed to improve the skin look gradually effect after each use. Following a similar procedure as in Study 1, participants were asked to imagine that they owned and have been using this product, and now the product was either almost full or almost empty (see Figure 1), depending on the condition. After this, participants were asked to imagine they have planned to have lunch with a friend, and that they are considering using some of the product. So, we asked them for their motivation to use the face brightening oil, using the same three items ( $\alpha$  = .96) from Study 1. Then, we asked participants "how motivated do you feel to preserve the amount of oil left in the bottle?" and "how much do you want to save the face brightening oil for later?", to test resource conservation desires ( $\alpha$  = .95). We also asked them to indicate the extent to which they agree with the following statements: "if I use my face oil today I will have a brighter skin sooner", and "if I use my face oil today I will have the effects of the oil more quickly", as a way to test for perception of contribution to the final goal. ( $\alpha = .94$ ).

### Results

Product benefit as a moderator for motivation to consume. A product level x product benefit ANOVA of motivation to consume yielded the predicted interaction (F(1, 295) = 30.00, p < .0001; see Figure 6). No main effects were

significant. Planned contrasts revealed that for the product delivering its benefits "upon finishing", participants expressed higher motivation to consume when the product was almost empty (M = 5.98) than when it was almost full (M = 4.98; F(1, 295) = 17.61; p < .0001). We also found that for the product delivering its benefits "as you go", participants expressed lower motivation to consume when the product was almost empty (M = 5.04) than when it was almost full (M = 5.88; F(1, 295) = 12.57; p < .0001).

# [INSERT FIGURE 6 HERE]

*Mediation analyses.* We conducted a moderated mediation analysis (Process Model 8; Hayes, 2008) with the two mediators: resource conservation desires and perceptions of contribution to the final goal as mediator. For resource conservation, the moderated mediation analyses showed a significant interaction effect between product level and product benefit on resource conservation desires (β = 1.58, t = 4.41, p < .0001; see Figure 7) and subsequently negative effect of resource conservation desires on motivation to consume (β = -.17, t = -3.37, p < .001). The CI of this moderated mediation excluded zero (95% CI: -4995 to -.0926, index = -.25).

Next, we examine conditional indirect effects. As predicted, the CI of the indirect effect of resource conservation desires for the product that delivers its benefits "as you go" excluded zero (95% CI: -.5262 to -.0940). Specifically, participants expressed more resource conservation desires when it was almost empty than when it was almost full ( $M_{AlmostFull} = 4.57$  vs.  $M_{AlmostEmpty} = 2.17$ ; F(1, 1)

295) = 19.43; p < .0001). Then, the higher resource conservation desires resulted in a higher motivation to consume ( $\beta = -.52$ , t (151) = -7.56, p < .0001). For the product that delivers benefits "upon finishing", product level did not affect resource conservation desires (p = .47).

# [INSERT FIGURE 7 HERE]

For perceptions of contribution to the final goal as mediator, results of the moderated mediation analysis (Process Model 8; Hayes, 2008) showed a significant interaction effect between product level and product benefit on perceptions of contribution of each usage to the final goal ( $\beta$  = -.66, t = -2.35, p < .02; see Figure 8) and subsequently of perceptions of contribution to the final goal on motivation to consume ( $\beta$  = .57, t = 9.45, p < .0001). The CI of this moderated mediation excluded zero (95% CI: -.7684 to -.0775, index = -.38).

Next, we examine conditional indirect effects. As predicted, the CI of the indirect effect of perceptions of contribution to the final goal for the product that delivers its benefits "upon finishing" excluded zero (95% CI: -.0581 to -.5515). Specifically, participants had higher perceptions of contribution of each usage to the final goal when it was almost empty than when it was almost full ( $M_{AlmostFull}$  = 4.80 vs.  $M_{AlmostEmpty}$  = 5.29; F(1, 295) = 6.02; p < .02). Then, the higher perceptions of contribution to the final goal resulted in a higher motivation to consume ( $\beta$  = .51, t (145) = 7.15, p < .0001). For the product that delivers benefits "as you go", product level did not affect perceptions of contribution to the final goal (p = .39).

# [INSERT FIGURE 8 HERE]

#### Discussion

In this study we provided additional evidence on how the product delivers its benefits moderates the effect of product level on motivation to consume a product. Results showed that for products that deliver their benefits "upon finishing", participants expressed higher perceptions of contribution of each usage to the final goal, when the product was almost empty than when it was full, and these perceptions will increase motivation to consume. For products that deliver their benefits "as you go", participants expressed higher resource conservation desires when the product was almost empty than when it was full. Subsequently, higher resource conservation desires decreased motivation to consume. These findings demonstrated that the same factor (i.e., product level) can drive two different processes depending on how products deliver their benefits (i.e., "upon finishing" versus "as you go"), and that these can affect how motivated are participants to consume the product, despite the product is still likeable and valued.

#### **GENERAL DISCUSSION**

Consumers purchase products for the benefits these bring them (Holbrook & Hirschman, 1982; Nowlis et al., 2004; Van Osselaer et al., 2005; Wang et al., 2009). In the process of obtaining these benefits, consumers might experience

changes in the motivation to consume. The current study suggests that product level will influence this motivation. In addition, we argue that how products deliver their benefits can play an important role in consumption. We distinguish between products that deliver their benefits "upon finishing" versus "as you go". The first category includes those products that deliver their benefits at the end of the consumption process: when consumers finish the product. The second category includes those products that deliver their benefits in each usage: every time consumers use the product. Findings of three studies support the notion that motivation to consume product that deliver their benefits "upon finishing" increases as product level decreases. However, motivation to consume products that deliver their benefits "as you go" decreases as product level decreases. Across three studies, we manipulated product level and product benefit, and found that results support our hypotheses. In order to extend the generalizability of our findings by using different products and different product benefits (e.g., straightening hair shampoo, hair thickening tonic, and face brightening oil). In addition, Study 2 demonstrated that for "as you go" products, the decrease in motivation to consume when the product was almost empty than when it was almost full was mediated by an increased in resource conservation desires. Study 3, corroborated these results in yet another setting, and showed that for "upon finishing" products, the increase in motivation to consume when the product was almost empty than when it was almost full was mediated by an increase in perceptions of contribution of each usage to the final goal.

Together these studies have important implications for theory. First, we contribute to research on post-purchase consumption. Our findings provide a

much needed different perspective to existing work that has mostly studied changes in motivation due to the dissatisfaction with product benefits (Bolton & Lemon, 1999; Prins, Verhoef, & Franses, 2009; Richins & Bloch, 1991). We shift the current focus towards situations where people still value and enjoy the product, but nevertheless restrict consumption. This provides a first account of a seemingly counterintuitive behavior, and offers solid reasoning why consumers might restrict the consumption of products that still provide value during consumption. In addition, we show that other product related factors affect the absence or decline of product consumption. Our investigation into the relevance of product level urges scholars to include controls for this factor at the very least. In more developed experimental settings, our paper suggests the control over time for different product levels, since the decline in product level has notable effects on motivation to consume.

Second, we contribute to research on motivation to consume with the proposed and tested hypothesis, that motivation can change as a result of the consumption itself. This complements empirical studies that have investigated the effects of different product factors (e.g., package size) as well as contextual factors (e.g. stockpiling) on the amount of product consumed (Ailawadi & Neslin, 1998; Chandon & Wansink, 2002; de Castro & Brewer, 1992; Wansink & Ray, 1996; Wansink & Van Ittersum, 2003), through the important introduction of relevant boundary conditions. We tested the strength of the relationship between product level and motivation to consume products with the moderating effect of how products deliver their benefits. We distinguish between products that deliver their benefits "upon finishing" and "as you go".

Third, we contribute to the scarcity literature. This research suggests that limited product supply increases willingness to pay, and the desirability of a product (Brock, 1968; Lynn, 1991; Snyder, 1992), and that scarcity creates a sense of urgency among consumers (Brock, 1968; Cialdini, 2007). For instance, scholars have shown that the value of a product increases to the extent that it is unavailable (Brock, 1968; Lynn, 1991; Snyder, 1992). This unavailability can create a need to preserve the product but it can also create a need to consume the product, as shown in precious research (Worchel et al., 1975). Our research contributes by suggesting that to understand the effects of scarcity in consumption setting, how the product delivers it benefits, is an important factor that has effects consumption motivation.

Our findings also give managerial guidance for better practices in management. Importantly, this study gives managers a clear idea of the process behind the decline in motivation to consume products and the role of product level. In doing so, the findings suggest the implementation of specific marketing strategies that help consumers to overcome the effect of low product levels. We recommend practitioners to opt for translucent packaging when the product delivers its benefits "upon finishing". However, we recommend using opaque packaging that limits the visualization of product level when the product delivers its benefits "as you go". This might help consumers to overcome the effects of product level on the motivation to consume products. Finally, we are hopeful this research will have some impact on better implementation of public policies that aim at resolving issues related to consumer's health and well-being, in particular as it relates to over-consumption of goods deemed bad for our health.

We suggest that a goal-based view of product consumption provides answers to questions related to product level and motivation to consume products. However, there are some limitations associated with this investigation. We focus on products that clearly signal depletion, products that are obviously getting "scarce". For future research, we suggest further examination of the effect of product level for products that do not make a visual determination of usage as easy, e.g. a leather jacket. Future research could also consider extending this research by examining the effect of product level on repurchase behavior or satisfaction. It might be a useful insight for retail marketing. Finally, we consider product benefits and distinguish between products that deliver their benefits "upon finishing" and "as you go". Our results suggest that differences in how products deliver their benefits matter for motivation to consumer, and our stimuli was designed to communicate these differences. However, it might be that for some products this characteristic does not need to be communicated, but the effect might still hold depending on how consumers perceive or expect the benefits to be delivered. This goes in line with the thought that consumers using products that deliver benefits "upon finishing" may perceive some benefits after each use like products that deliver their benefits "as you go". This suggests that perceptions or expectations is what matters, however, this needs further study. In addition, there might be other patterns of product benefits. For instance, there are products that deliver the bulk of their benefits at the beginning of the consumption process: in the first usage occasion. It could be interesting to test if the effect of product level on motivation to consume changes when product deliver their bulk of benefits at the beginning.

#### REFERENCES

- Ailawadi, K. L., & Neslin, S. A. (1998). The effect of promotion on consumption:

  Buying more and consuming it faster. *Journal of Marketing Research*, 390-398.
- Bolton, R. N., & Lemon, K. N. (1999). A dynamic model of customers' usage of services: usage as an antecedent and consequence of satisfaction. *Journal of Marketing Research*, 171-186.
- Brock, T. C. (1968). Implications of commodity theory for value change.

  \*Psychological foundations of attitudes, 243-275.
- Chandon, P., & Wansink, B. (2002). When Are Stockpiled Products Consumed Faster? A Convenience–Salience Framework of Postpurchase Consumption Incidence and Quantity. *Journal of Marketing Research*, *39*(3), 321-335.
- Cialdini, R. B. (2007). *Influence : the psychology of persuasion* (Rev. ed. ed.).

  New York :: HarperCollins.
- de Castro, J. M., & Brewer, E. M. (1992). The amount eaten in meals by humans is a power function of the number of people present. *Physiology & Behavior*, *51*(1), 121-125.
- Dhar, R., & Simonson, I. (1999). Making complementary choices in consumption episodes: Highlighting versus balancing. Journal of Marketing Research, 29-44.
- Fishbach, A., & Ferguson, M. J. (2007). The goal construct in social psychology.

- Folkes, V. S., Martin, I. M., & Gupta, K. (1993). When to say when: Effects of supply on usage. *Journal of Consumer Research*, 467-477.
- Gollwitzer, P. M. (1990). Action phases and mind-sets. *Handbook of motivation* and cognition: Foundations of Social Behavior, 2, 53-92.
- Goodman, J. K., & Paolacci, G. (2017). Crowdsourcing consumer research. *Journal of Consumer Research*, *44*(1), 196-210.
- Griskevicius, V., Tybur, J. M., Delton, A. W., & Robertson, T. E. (2011). The influence of mortality and socioeconomic status on risk and delayed rewards: a life history theory approach. *Journal of Personality and Social Psychology*, 100(6), 1015.
- Hayes, A. F. (2008). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*: Guilford Press.
- Hobfoll, S. E. (2002). Social and psychological resources and adaptation.

  Review of General Psychology, 6(4), 307.
- Holbrook, M. B., & Hirschman, E. C. (1982). The experiential aspects of consumption: consumer fantasies, feelings, and fun. *Journal of Consumer Research*, 132-140.
- Hull, C. L. (1932). The goal-gradient hypothesis and maze learning. *Psychological Review*, 39(1), 25.

- Kivetz, R., Urminsky, O., & Zheng, Y. (2006). The goal-gradient hypothesis resurrected: Purchase acceleration, illusionary goal progress, and customer retention. *Journal of Marketing Research*, *43*(1), 39-58.
- Koo, M., & Fishbach, A. (2008). Dynamics of self-regulation: How (un) accomplished goal actions affect motivation. *Journal of Personality and Social Psychology*, *94*(2), 183.
- Kruglanski, A. W., Shah, J. Y., Fishbach, A., Friedman, R., Woo Young, C., & Sleeth-Keppler, D. (2002). A theory of goal systems. In P. Z. Mark (Ed.), Advances in Experimental Social Psychology (Vol. Volume 34, pp. 331-378): Academic Press.
- 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.
- Locke, E. A., & Latham, G. P. (1990). *A theory of goal setting & task performance*: Prentice-Hall, Inc.
- Locke, E. A., & Latham, G. P. (1994). Goal setting theory. *Motivation: Theory and Research*, 13-29.
- Lynn, M. (1991). Scarcity effects on value: A quantitative review of the commodity theory literature. *Psychology & Marketing, 8*(1), 43-57.

- Morewedge, C. K., Shu, L. L., Gilbert, D. T., & Wilson, T. D. (2009). Bad riddance or good rubbish? Ownership and not loss aversion causes the endowment effect. *Journal of Experimental Social Psychology*, *45*(4), 947-951.
- Muraven, M., Shmueli, D., & Burkley, E. (2006). Conserving self-control strength. *Journal of personality and social psychology*, *91*(3), 524.
- Nowlis, S. M., Mandel, N., & McCabe, D. B. (2004). The Effect of a Delay between Choice and Consumption on Consumption Enjoyment. [Article]. *Journal of Consumer Research*, 31(3), 502-510.
- O'Donoghue, T., & Rabin, M. (1999). Doing it now or later. *American Economic Review*, 103-124.
- Prins, R., Verhoef, P. C., & Franses, P. H. (2009). The impact of adoption timing on new service usage and early disadoption. *International Journal of Research in Marketing*, 26(4), 304-313.
- Raynor, H. A., & Wing, R. R. (2007). Package unit size and amount of food: do both influence intake? *Obesity, 15*(9), 2311-2319.
- Reb, J., & Connolly, T. (2007). Possession, Feelings of Ownership, and the Endowment Effect. *Judgment and Decision Making*, 2(2), 107-114.
- Richins, M. L., & Bloch, P. H. (1991). Post-purchase product satisfaction: incorporating the effects of involvement and time. *Journal of Business Research*, 23(2), 145-158.

- Snyder, C. R. (1992). Product scarcity by need for uniqueness interaction: a consumer catch-22 carousel? *Basic and Applied Social Psychology, 13*(1), 9-24.
- Solovitch, S. (2016). Hoarding is a serious disorder and it's only getting worse in the U.S. *The Washington Post*. Retrieved from https://www.washingtonpost.com/national/health-science/hoarding-is-serious-disorder--and-its-only-getting-worse-in-the-us/2016/04/11/b64a0790-f689-11e5-9804-537defcc3cf6\_story.html?noredirect=on&utm\_term=.184adb3b24bf
- Van Osselaer, S. M., Ramanathan, S., Campbell, M. C., Cohen, J. B., Dale, J. K., Herr, P. M., et al. (2005). Choice based on goals. *Marketing Letters*, 16(3-4), 335-346.
- Wallace, S. G., & Etkin, J. (2017). How Goal Specificity Shapes Motivation: A Reference Points Perspective. *Journal of Consumer Research*, 44(5), 1033-1051.
- Wang, J., Novemsky, N., & Dhar, R. (2009). Anticipating Adaptation to Products.

  [Article]. *Journal of Consumer Research*, 36(2), 149-159.
- Wansink, B., & Ray, M. L. (1996). Advertising strategies to increase usage frequency. *Journal of Marketing*, 31-46.
- Wansink, B., & Van Ittersum, K. (2003). Bottoms up! The influence of elongation on pouring and consumption volume. *Journal of Consumer Research*, 30(3), 455-463.

- Gatorade Website, Retrieved 07 of July, 2018, 2018, from https://www.gatorade.com/products/bars-and-chews/energy-chews-strawberry-1-1-oz-16-pack
- Gatorade Website, Retrieved 7 of July, 2018, 2018, from https://www.gatorade.com/products/sports-drinks/thirst-quenchertropical-cooler-20-fl-oz-16-pack
- Worchel, S., Lee, J., & Adewole, A. (1975). Effects of supply and demand on ratings of object value. *Journal of Personality and Social Psychology*, 32(5), 906.
- Wu, F., Samper, A., Morales, A. C., & Fitzsimons, G. J. (2017). It's Too Pretty to Use! When and How Enhanced Product Aesthetics Discourage Usage and Lower Consumption Enjoyment. *Journal of Consumer Research*, 44(3), 651-672.

#### PICTURES OF PRODUCTS USED AS EXPERIMENTAL STIMULI

Almost full version of the product is on the left, almost empty version on the right



"Upon finishing" description: This shampoo is made with a mixture of ingredients that leaves your hair perfectly straight after 30 days of usage. You have to use this shampoo 30 times to observe the effect, and after finishing one bottle, you will have amazing straight and smooth hair. At any point in time, you can stop using the product. However, you will not be able to continue the treatment with the same results at the end. "As you go" description: This shampoo is made with a mixture of ingredients that leaves your hair perfectly straight after each usage. You have to use this shampoo, and after each usage, you will see that your hair is little by little getting more straight and smoother. At any point in time, you can stop using the product. However, you will be able to continue the treatment with the same gradual results after each usage.



Used in Study 2

"Upon finishing" description: The product we will present you is a Hair thickening tonic. This hair tonic is made with a mixture of ingredients that makes you hair perfectly thick by the time you finish the bottle. In other words, to observe the effect, you have to finish the entire bottle. After finishing it, you will have amazing thick and strong hair. At any point in time, you can stop using the product. However, if you don't finish it, you will not be able to see the results.

"As you go" description: The product we will present you is a Hair thickening tonic. This hair tonic is made with a mixture of ingredients that makes you hair gradually thick after each usage. In other words, you will see a gradual effect after each usage. After each usage, you will see that your hair is little by little getting thicker and stronger. At any point in time, you can stop using the product. However, you will be able to continue the treatment with the same gradual results after each usage.



Used in Study 3

"Upon finishing" description: BrightUp at the End™ is a face brightening oil. This oil is made with a dermatology tested new formulation that includes a mixture of powerful ingredients that brighten your skin and reduce dark spots once you finish the full oil. This brightening oil has been clinically shown to ultimately improve the skin look by the time you finish the entire bottle. In other words, you will observe the effect of the oil after you finish the entire bottle. After finishing it, you will see that your skin is amazingly bright and radiant.

"As you go" description: BrightUp Gradually™ is a face brightening oil. This oil is made with a dermatology tested new formulation that includes a mixture of powerful ingredients that brighten your skin and reduce dark spots gradually after each time you use the oil. This brightening oil has been clinically shown to progressively improve the skin look. In other words, you will observe a gradual effect after each use. After each use, you will see that you that your skin is little by little getting amazingly bright and radiant.

FIGURE 2

EFFECT OF PRODUCT LEVEL ON MOTIVATION TO CONSUME

PRODUCTS (STUDY 1)

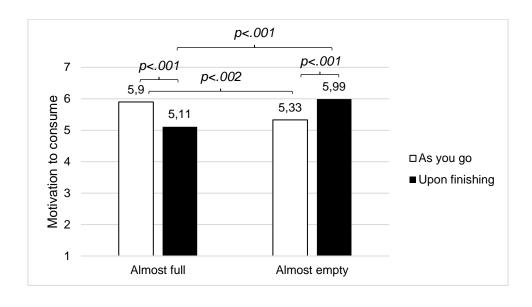


FIGURE 3

EFFECT OF PRODUCT LEVEL ON MOTIVATION TO CONSUME PRODUCTS (STUDY 2)

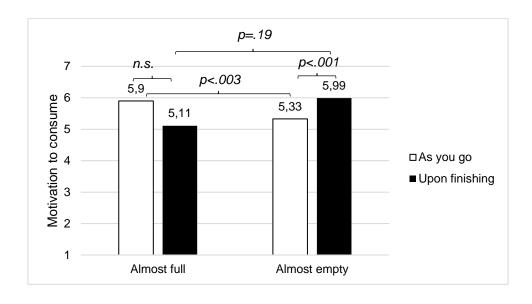
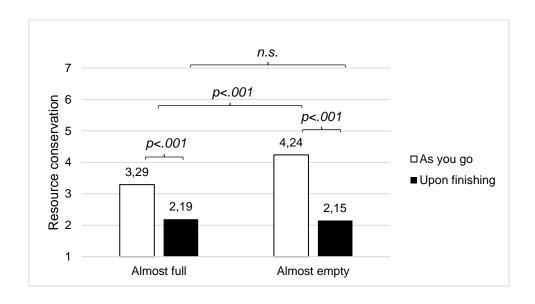


FIGURE 4

EFFECT OF PRODUCT LEVEL ON RESOURCE CONSERVATION

(STUDY 2)



# EFFECT OF PRODUCT LEVEL ON MOTIVATION TO CONSUME PRODUCTS MEDIATED BY RESOURCE CONSERVATION (STUDY 2)

(Index of Moderated Mediation=.37; 95% CI: .113 to .708)

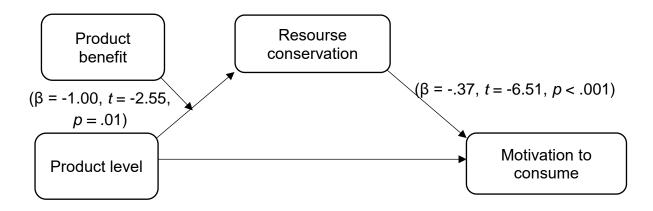
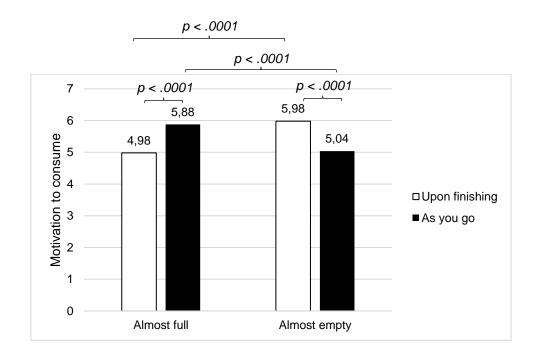


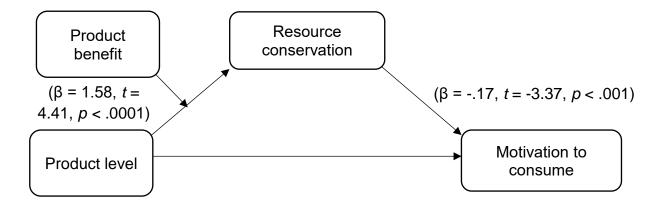
FIGURE 6

EFFECT OF PRODUCT LEVEL ON MOTIVATION TO CONSUME PRODUCTS (STUDY 3)



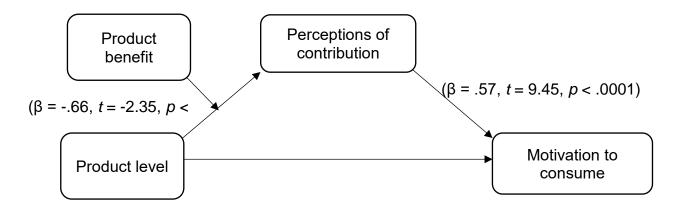
# EFFECT OF PRODUCT LEVEL ON MOTIVATION TO CONSUME PRODUCTS MEDIATED BY RESOURCE CONSERVATION (STUDY 3)

(Index of Moderated Mediation= -.25; 95% CI: -.4995 to -.0926)



# EFFECT OF PRODUCT LEVEL ON MOTIVATION TO CONSUME PRODUCTS MEDIATED BY PERCEPTIONS OF CONTRIBUTION (STUDY 3)

(Index of Moderated Mediation= -.38; 95% CI: -.7684 to -.0775)



#### **CHAPTER V**

# **SUMMARY AND FUTURE RESEARCH DIRECTIONS**

This three-essay dissertation presents twelve empirical studies investigating factors affecting the choice and consumption of conspicuous products. The first two essays examine factors that influence consumers at the moment of choice. The last essay examines consumer behavior during consumption. Taken together, these three essays explore individual, contextual, and product related factors that affect the choice and consumption of products that are equally high in three dimensions of conspicuous consumption: (1) uniqueness, (2) status and (3) hedonism.

The first essay focuses on uniqueness, and introduces duration of uniqueness as an important component of uniqueness consumption. It demonstrates that the interplay between pressure and need for uniqueness (NFU) affects how individuals choose between unique products that differ in their duration of uniqueness: timeless versus trendy products. This essay finds that pressure can have different effects on consumers depending on motivation. Specifically, studies show that high-NFU individual under higher pressure, compared to lower pressure, tend to choose timeless over trendy products. Additional findings suggest that this tendency is because high-NFU individuals focus more (vs. less) on the duration of uniqueness. Furthermore, pressure does not have an effect on individuals who display low NFU.

The second essay focuses on the status dimension, and establishes colorvalue as a weak status signal. Five studies demonstrate that individuals seeking status perceive higher status in lower color value, and thus prefer lower color-value (i.e., darker) products over higher color-value (i.e., lighter) ones. Moreover, this essay shows that the influence of color-value on perceptions of status is attenuated when color-value is salient during status evaluations.

The third essay focuses on the hedonic component of conspicuous consumption, and explains how product level can influence decrease in consumption. It proposes and explains how product level affects motivation to consume a product, depending on how the product delivers its benefits. Three studies confirm that motivation to consume a product that delivers its benefits "upon finishing" increases while product level decreases. Further results suggest that this is because individuals perceive that consumption contributes to the attainment of the full benefits. However, motivation to consume a product that delivers its benefits "as you go" decreases while product level decreases. This decrease in motivation is mediated by an increase in the desire to conserve resources that emerges in consumers when product level is low.

In the next section, I discuss the contribution of this research, and suggest different avenues for future research.

#### General contribution

The findings of this dissertation make two major contributions. First, I take a novel approach to the study of choice and consumption of conspicuous products. Extant research has mostly studied how individual (e.g., Lynn & Harris, 1997; Richins & Dawson, 1992), and contextual factors (e.g., Lee & Shrum, 2012;

Wang & Griskevicius, 2014) influence the choice between conspicuous versus non-conspicuous products. Nonetheless, frequently consumers have already decided to purchase a conspicuous product, and they only have to decide which one. They will choose amongst conspicuous products. Notwithstanding its importance, only limited research has examined how consumers choose between conspicuous products by identifying a key dimension of such choices: the strength of the conspicuous signal (Berger & Ward, 2010; Han, Nunes, & Drèze, 2010). This dissertation supports and extends this line of research by opening up a new perspective and discovering that conspicuous consumption is a multidimensional phenomenon whose dimensions need to be independently studied. In this research, I focused on three dimensions: (1) uniqueness, (2) status and (3) hedonism.

Second, this dissertation identifies, investigates, and introduces the factors that affect choice and consumption of conspicuous products. Some of these factors are motivational factors, such as need for uniqueness and status seeking states; others are contextual factors, such as pressure; and finally I introduce product-related factors, such as color-value and product level. Generally, all of these are important pieces in the puzzle to study and understand conspicuous consumption at the moment of choice, and during consumption.

#### **Limitations and Future Directions**

A first limitation of the current studies is that participants engaged in manipulations that simulated choice tasks or consumption settings considering

products that in some cases (Essay 1) were pre-tested to fulfill their function. However, in exchange, this allowed us to control and isolate the phenomenon to ensure the robustness of our findings. Moreover, in an effort to produce more natural settings, I measured and primed motivational drivers (Essay 1, and 2), extended the number of choice options (Essay 2), or tested the effects with multiple products (Essay 3), in consequential choice tasks (Essay 1, and 2). These experimental studies were also complemented with pilot and field studies (Essay 1, and 2), to add external validity to our findings.

Second, each of the three essays of this dissertation focuses on a different and important dimension of conspicuous consumption: uniqueness, status, and hedonism. While this allows us to concentrate on the study of conspicuous consumption as a multidimensional construct, these three dimensions are not collectively exhaustive. Indeed, there are other known dimensions such as heritage and artisanship that also define conspicuous consumption (Dubois & Duquesne, 1993). Further research is needed to examine choice and consumption of luxury goods that are high in these dimensions. Similarly, this limitation opens up the possibility for future research to examine choices and consumption of products that are strong in multiple dimensions simultaneously, and to understand how consumers prioritize them. For example, would consumers prefer uniqueness over status? This is a matter that still awaits investigation.

Finally, another limitation is that this investigation relied mainly on participants from the United Sates. Given that these participants are presumed to be individualistic, it would be interesting to analyze if findings hold with

participants from more collectivistic cultures. It is our untested expectation that these results hold as conspicuous consumption is a fundamental motive that has persisted across history and cultures. However, culture is bound to play an important role that is worth to study in future research. In summary, this dissertation can help researchers and managers to comprehend conspicuous consumption as a phenomenon, and hope to inspires further research to improve our understanding of how consumers choose amongst conspicuous products, and what factors affect their consumption.

# **CAPÍTULO V**

# RESUMEN Y DIRECCIONES FUTURAS DE INVESTIGACIÓN

Esta tesis de tres ensayos presenta doce estudios empíricos que investigan los factores que afectan la elección y el consumo de productos conspicuos. Los dos primeros ensayos examinan los factores que influyen en los consumidores *en el momento* de la elección. El último ensayo examina el comportamiento del consumidor *durante* el consumo. Tomados en conjunto, estos tres ensayos exploran factores individuales, contextuales, y los relacionados al producto, que afectan la elección y el consumo de productos que son igualmente altos en tres dimensiones del consumo conspicuo: (1) unicidad, (2) estatus y (3) hedonismo.

El primer ensayo se centra en la unicidad e introduce la duración de la unicidad como un componente importante del consumo de productos únicos. Demuestra que la interacción entre la presión y la necesidad de ser único (NFU) afecta la forma en que las personas eligen entre productos únicos que difieren en la duración de su unicidad: productos atemporales versus de moda. Este ensayo encuentra que la presión puede tener diferentes efectos en los consumidores dependiendo de la motivación. Específicamente, estudios muestran que los individuos con alta NFU y bajo alta presión, en comparación con baja presión, tienden a elegir productos atemporales sobre los de moda. Hallazgos adicionales sugieren que esta tendencia se debe a que los individuos de alta NFU se enfocan más en la duración de la unicidad. Además, la presión no tiene un efecto en las personas que muestran baja NFU.

El segundo ensayo se centra en estatus como dimensión, y establece al brillo del color como un indicador débil de estatus. Cinco estudios demuestran que los individuos que buscan estatus perciben más estatus de productos de bajo brillo del color y, por lo tanto, prefieren productos de bajo brillo del color (es decir, más oscuros) que los de alto brillo del color (es decir, más claros). Además, este ensayo muestra que la influencia del brillo del color en las percepciones de estatus se atenúa cuando el brillo del color es sobresaliente durante las evaluaciones de estatus.

El tercer ensayo se centra en el componente hedónico del consumo conspicuo y explica cómo el nivel de producto puede influir en la disminución del consumo. Propone y explica cómo el nivel de producto afecta la motivación para consumir, dependiendo de cómo el producto ofrece sus beneficios. Tres estudios confirman que la motivación para consumir un producto que ofrece sus beneficios "al finalizar" aumenta a medida que disminuye el nivel de producto. Resultados adicionales sugieren que esto se debe a que los individuos perciben que el consumo contribuye al logro de todos los beneficios. Sin embargo, la motivación para consumir un producto que ofrece sus beneficios "sobre la marcha" disminuye a medida que disminuye el nivel de producto. Esta disminución de la motivación está mediada por un aumento en el deseo de conservar recursos que emerge en los consumidores cuando el nivel de producto es bajo.

En la siguiente sección, analizo la contribución de esta investigación y sugiero diferentes vías para futuras investigaciones.

# Contribución general

Los hallazgos de esta tesis hacen dos contribuciones principales. En primer lugar, adopto un enfoque novedoso para el estudio de la elección y el consumo de productos conspicuos. La investigación existente ha estudiado principalmente cómo los factores individuales (por ejemplo, Lynn & Harris, 1997; Richins & Dawson, 1992) y factores contextuales (por ejemplo, Lee & Shrum, 2012; Wang & Griskevicius, 2014) influyen en la elección entre productos versus no-conspicuos. No obstante, con frecuencia conspicuos consumidores ya han decidido comprar un producto conspicuo, y solo tienen que decidir cuál. Ellos elegirán entre los productos conspicuos. A pesar de su importancia, solo una investigación limitada ha examinado cómo los consumidores eligen entre productos conspicuos al identificar una dimensión clave de tales elecciones: la fuerza de la señal conspicua (Berger & Ward, 2010, Han, Nunes & Drèze, 2010). Esta disertación apoya y amplía esta línea de investigación al abrir una nueva perspectiva y descubrir que el consumo conspicuo es un fenómeno multidimensional cuyas dimensiones deben estudiarse independientemente. En esta investigación, me centré en tres dimensiones: (1) unicidad, (2) estatus y (3) hedonismo.

En segundo lugar, esta tesis identifica, investiga e introduce los factores que afectan la elección y el consumo de productos conspicuos. Algunos de estos factores son factores motivacionales, como la necesidad de ser único y la búsqueda de estatus; otros son factores contextuales, como la presión; y finalmente presentamos factores relacionados con el producto, como el brillo del color y el nivel de producto. En general, todas estas son piezas importantes en

el rompecabezas para estudiar y comprender el consumo conspicuo *en el momento* de la elección y *durante* el consumo.

# Limitaciones y direcciones futuras

Una primera limitación de los estudios actuales es que los participantes se involucraron en manipulaciones que simulaban tareas de elección o configuraciones de consumo considerando productos que en algunos casos (Ensayo 1) fueron probados previamente para cumplir su función. Sin embargo, a cambio, esto nos permitió controlar y aislar el fenómeno para garantizar la solidez de nuestros hallazgos. Además, en un esfuerzo por producir entornos más naturales, medimos y manipulamos elementos motivacionales (Ensayo 1 y 2), ampliamos el número de opciones de elección (Ensayo 2) o probamos los efectos con múltiples productos (Ensayo 3), en tareas de elección consecuentes (Ensayo 1 y 2). Estos estudios experimentales también se complementaron con estudios pilotos y de campo (Ensayo 1 y 2) para agregar validez externa a nuestros hallazgos.

En segundo lugar, cada uno de los tres ensayos de esta tesis se centra en una dimensión diferente e importante del consumo conspicuo: unicidad, estatus y hedonismo. Si bien esto nos permite concentrarnos en el estudio del consumo conspicuo como una construcción multidimensional, estas tres dimensiones no son colectivamente exhaustivas. De hecho, hay otras dimensiones conocidas, como la herencia y la artesanía, que también definen el consumo conspicuo (Dubois & Duquesne, 1993). Es necesaria más investigación

para examinar la elección y el consumo de productos de lujo que son altos en estas dimensiones. Del mismo modo, esta limitación abre la posibilidad de que las investigaciones futuras examinen las elecciones y el consumo de productos que sean sólidos en múltiples dimensiones simultáneamente, y para comprender cómo los consumidores las priorizan. Por ejemplo, ¿los consumidores preferirían la unicidad sobre el estatus? Este es un asunto que aún está pendiente de investigación.

Finalmente, otra limitación es que esta investigación se basó principalmente en participantes de los Estados Unidos. Dado que se supone que estos participantes son individualistas, sería interesante analizar si los hallazgos se mantienen con participantes de culturas más colectivistas. Es nuestra expectativa que estos resultados se mantengan ya que el consumo conspicuo es una motivación fundamental que ha persistido a través de la historia y las culturas. Sin embargo, la cultura desempeña un papel importante que vale la pena estudiar en futuras investigaciones. En resumen, esta tesis puede ayudar a los investigadores y gerentes a comprender el consumo conspicuo como un fenómeno, y espera inspirar más investigaciones para mejorar nuestra comprensión de cómo los consumidores eligen entre los productos conspicuos, y qué factores afectan su consumo.

#### REFERENCES

- Berger, J., & Ward, M. (2010). Subtle signals of inconspicuous consumption. *Journal of Consumer Research*, 37(4), 555-569.
- Dubois, B., & Duquesne, P. (1993). The market for luxury goods: Income versus culture. *European Journal of Marketing*, *27*(1), 35-44.
- Han, Y. J., Nunes, J. C., & Drèze, X. (2010). Signaling status with luxury goods:

  The role of brand prominence. *Journal of Marketing*, 74(4), 15-30.
- Lee, J., & Shrum, L. J. (2012). Conspicuous Consumption versus Charitable

  Behavior in Response to Social Exclusion: A Differential Needs

  Explanation. *Journal of Consumer Research*, 39(3), 530-544.
- Lynn, M., & Harris, J. (1997). The desire for unique consumer products: A new individual differences scale. *Psychology and Marketing*, *14*(6), 601-616.
- Richins, M. L., & Dawson, S. (1992). A consumer values orientation for materialism and its measurement: Scale development and validation.

  Journal of Consumer Research, 19(3), 303.
- Wang, Y., & Griskevicius, V. (2014). Conspicuous Consumption, Relationships, and Rivals: Women's Luxury Products as Signals to Other Women.
  [10.1086/673256]. Journal of Consumer Research, 40(5), 834-854.