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Doctoral Dissertation

/

Tesis Doctoral

**MACRO-LEVEL PERSPECTIVES ON CONSUMER BRAND
PREFERENCE**

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**MACRO PERSPECTIVAS EN LA PREFERENCIA
DE MARCA DEL CONSUMIDOR**

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TABLE OF CONTENTS

Dedication	VIII
Acknowledgments.....	IX
Abstract	X
Resumen.....	XI
Introduction.....	XIII
Introducción	XVIII
CHAPTER I. The Impact of New Product Names on Brand Preference on Crowdfunding	
Platforms	23
Conceptual Background and Hypotheses	25
The Importance of New Product Names.....	25
Semantic and Non-Semantic New Product Names.....	26
New Product Development and Crowdfunding	28
New Product Names and Crowdfunding	29
New Product Names and Crowdfunding Outcomes: A Curiosity-Based Mechanism	30
Study 1: The Effect of Non-Semantic New Product Names on Crowdfunding Outcomes	31
Data and Sample	32
Variables	32
Analyses and Results	36
Do More Persuasive Campaigns Benefit More from Non-Semantic New Product Names	38
Discussion.....	39
Studies 2a and 2b: A Mechanism Underlying the Effect of Non-Semantic Names	40
Study 2a: Stimuli and Pretest.....	40
Study 2a: Method and Measures.....	41
Study 2a: Analysis, Results, and Discussion	41
Study 2b: Stimuli	42
Study 2b: Method and Measures.....	43
Study 2b: Analysis, Results, and Discussion	44
General Discussion	46
Theoretical Contributions and Practical Implications.....	46
Limitations and Directions for Future Research.....	48

CHAPTER II. The Impact of Mortality Salience on Brand Preference	50
Conceptual Background.....	51
Mortality Salience.....	51
Brand Personality.....	54
Association Between Exciting Brands and The Notion of Change	56
Study 1: Field Evidence for the Effect.....	57
Data.....	57
Measures	58
Test of Difference-in-Differences Assumption	61
Results of the Difference-in-Differences Model.....	62
Is the Detrimental Effect of MS Unique to Exciting Brands?	66
Robustness Checks.....	68
Study 2: Experimental Evidence for the Effect	70
Design and Procedure	70
Results.....	71
Study 3: A Mechanism Underlying the Effect.....	72
Design and Procedure	72
Results.....	73
Study 4: How to Overcome the Effect.....	74
Design and Procedure	75
Results.....	75
General Discussion	76
CHAPTER III. The Impact of Electoral Successes and Failures on Brand Preference.....	80
Theoretical Background.....	81
Liberal Political Ideology and Consumption	81
Liberal Political Ideology and Brand Personality	82
Political Elections and Evaluations of Exciting Brands	84
Studies 1a-1b: Field evidence	86
Methodology	86
Data and variables.....	86
Model formulation	90
Study 1a: Results.....	91
Study 1b: Results	94
Discussion.....	95

Study 2a: Are brands with the exciting brand personality more closely associated with the liberal political ideology?	95
Method and participants.....	95
Results and discussion	95
Study 2b: Does liberal electoral success (vs. failure) impact perceived popularity of the exciting brand?.....	96
Method and participants.....	97
Results and discussion	97
Study 3: Does a change in perceived popularity mediate the effect of liberal electoral success (vs. failure) on consumer evaluations of the exciting brand?	98
Method and participants.....	98
Results and discussion	99
General Discussion	100
Conclusion	104
Conclusión	107
References.....	111
Appendix A. Additional Materials For Chapter 1	129
Appendix B. Additional Materials For Chapter 2.....	137
Pilot Study: Are Brands with an Exciting (But Not Other) Personality Closely Associated with the Notion of Change?	137
Design and Procedure	137
Results.....	137
Study 2: MS Induction.....	142
Study 2: Brand Personality Stimuli.....	142
Study 2: Pretest	143
Study 2: Additional Analyses with Participants' Age, PANAS, and Arousal.....	144
Study 3: MS Induction	144
Study 3: Brand Personality Stimuli.....	145
Study 3: Additional Analyses with Participants' Age, Arousal and Stress	145
Study 4: MS Induction	146
Study 4: Brand Personality Stimuli.....	146
Study 4: Pretest	146
Study 4: Additional Analyses with Participants' Age	147
Appendix C. Additional Materials For Chapter 3.....	148

Study 2b: Experimental manipulation of electoral success (vs. failure) of the liberal candidate 149

Study 2b: Description of a brand with the exciting personality..... 149

Study 3: Description of a brand with the exciting personality..... 150

Study 3: Pretest of brand descriptions 150

LIST OF TABLES

Table 1.1. Study 1: Descriptive Statistics and Pairwise Correlations	34
Table 1.2. Study 1: Sample Description Per Country and Sub-Category	35
Table 1.3. Study 1: The Effect of Non-Semantic New Product Names on Backers’ Funding Decisions	37
Table 2.1. MS and Avoidance of Change: Summary of relevant research	53
Table 2.2. Summary of relevant research on brand personality	55
Table 2.3. Study 1: Sample Description	59
Table 2.4. Study 1: Test of the Difference-in-Differences Assumption: Does CBBE of Exciting Brands Change Before the Shock of 9/11?	63
Table 2.5. Study 1: Results of the Difference-in-Differences Model	64
Table 2.6. Study 1: The Effect is Observed only for Exciting, but not Other, Brands	67
Table 3.1. Studies 1a-1b: Sample Description	89
Table 3.2. Studies 1a-1b: Summary of Results	92
Table A1. Example of the Coding Scheme Used in Study 1	129
Table A2. Additional Analysis: The Effect of Non-Semantic New Product Names is Greater for Campaign Descriptions with More (Vs. Less) Certainty	130
Table A3. Measurement Instruments in Study 2b	131
Table B1. Study 1: Robustness Test Using the Balanced Panel Dataset	139
Table B2. Study 1: Robustness Test with Winsorized Variables	140
Table B3. Study 1: Robustness Test with the “Fake” Event Regression Using a Different BAV Dataset for Q1 2002-Q2 2003	141

LIST OF FIGURES

Figure 1.1. Conceptual model.....	24
Figure 1.2. Study 2b: Indirect Effect of Non-Semantic New Product Name in a Serial Mediation	45
Figure 2.1. Study 1: Impact of 9/11 on CBBE Across Levels of Exciting Brand Personality	65
Figure 2.2. Study 2: MS Decreased Evaluation of the Exciting (But Not Sincere) Brand.....	72
Figure 2.3. Study 3: Avoidance of Change Mediated the Detrimental Effect of MS on Evaluation of the Exciting Brand.....	74
Figure 2.4. Study 4: Weakening Exciting Brands' Association with the Notion of Change Eliminated the Detrimental Effect of MS	76
Figure 3.2. Impact of election outcomes across levels of the exciting brand personality	93
Figure 3.2. Study 3: Perceived brand popularity mediated the effect of electoral success (vs. failure) on consumer evaluations of the exciting brand.....	100
Figure A1. The Names of New Products are Prominent on Reward-Based Crowdfunding Platforms: Examples Across Different Reward-Based Crowdfunding Platforms.....	132
Figure A2. Summary of the Main Results and Robustness Checks of Study 1: The Effect of <i>Non-Semantic Name on Funds Collected</i> (Linear Predictions)	133
Figure A3. The Effect of <i>Non-Semantic</i> (Vs. <i>Semantic</i>) <i>Name on Funds Collected</i> is Larger for Crowdfunding Campaigns Endorsed by Kickstarter.....	134
Figure A4. Study 2a: Example of Stimuli.....	135
Figure A5. Study 2b: Example of Stimuli for the Non-Semantic Name Condition	136
Figure C1. Studies 1a-1b: Consumer interest in presidential candidates peaked in the 4th quarter of the election year, following by a decrease in the 1st quarter of the subsequent year: Google trends data	148

DEDICATION

*To my Mom, a constant source
of inspiration, strength, and love.*

*Моей маме—источнику
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ABSTRACT

In the last few decades, a lot has changed—new technologies have substantively reshaped markets and human behaviors, the threats of terrorist attacks and deadly pandemics have become realities, and the political climate has grown increasingly polarized. These new challenges can directly impact consumption. However, little is known about how such macro-level factors can affect consumers' preferences for brands. This thesis seeks to add to the marketing literature by investigating the influence of several important macro-level drivers on consumers' brand preferences and the psychological mechanisms underlying this influence.

Chapter 1 explores how consumers' brand preferences are shaped in the context of new technologies. The chapter focuses on the increasingly important phenomenon of crowdfunding. In a large-scale field study and two follow-up studies, I find that non-semantic brand names—those that do not evoke a specific meaning—can arouse curiosity in consumers. This heightened curiosity then positively affects the outcomes of crowdfunding campaigns for new products.

Chapter 2 investigates how consumers' brand preferences can be impacted by events that increase mortality salience, such as terrorist attacks or deadly pandemics. In a field study using a difference-in-differences methodology and three experiments, I show that mortality salience increases consumers' tendency to avoid change. Exciting brands are closely associated with the notion of change, and consumers tend to prefer exciting brands less when mortality is salient.

Chapter 3 examines how consumers' brand preferences can be influenced by sociopolitical events, such as electoral successes or failures. In two large-scale field studies and three experiments, I demonstrate that, because exciting brands closely reflect the liberal political ideology, electoral success for the liberal side can increase consumers' preferences for exciting brands. Yet, the electoral failure for the liberal side has an opposite effect.

The insights from this thesis are consequential, because they shed light on what are currently under-researched sets of drivers of consumers' brand preferences. In addition, because practitioners typically have limited control over the macro-level factors, the findings from this thesis offer much-needed guidance on how marketers can recognize, adapt to, and take advantage of such large-scale market pressures.

RESUMEN

Muchas cosas han cambiado en las últimas décadas: las nuevas tecnologías han remodelado sustancialmente los mercados y el comportamiento humano, las amenazas de ataques terroristas y pandemias se han convertido en realidades y el clima político se ha polarizado cada vez más. Estos nuevos desafíos pueden impactar directamente en el consumo. Sin embargo, se sabe poco sobre cómo estos nuevos macro factores pueden afectar las preferencias de los consumidores por las marcas. Esta tesis busca añadir a la literatura de marketing al investigar la influencia de varios macro impulsores importantes en las preferencias de marca del consumidor y, los mecanismos psicológicos que subyacen a esta influencia.

El Capítulo 1 explora cómo se configuran las preferencias de marca de los consumidores en el contexto de las nuevas tecnologías. El capítulo se centra en el fenómeno, cada vez más importante, del crowdfunding. En un estudio de campo a gran escala y dos estudios de seguimiento, descubrí que las marcas no semánticas, aquellas que no evocan un significado específico, pueden despertar la curiosidad en los consumidores. Esta mayor curiosidad afecta positivamente los resultados de las campañas de crowdfunding para nuevos productos.

El Capítulo 2 investiga cómo las preferencias de marca de los consumidores pueden verse afectadas por eventos que incrementan la mortalidad, como los ataques terroristas o las pandemias. En un estudio de campo que utiliza una metodología de diferencias en diferencias y tres experimentos, muestro que la prominencia de la mortalidad aumenta la tendencia de los consumidores a evitar el cambio. Las marcas emocionantes están estrechamente asociadas con la noción de cambio, y los consumidores tienden a preferir menos las marcas emocionantes cuando la mortalidad es saliente.

El Capítulo 3 examina cómo las preferencias de marca de los consumidores pueden verse influenciadas por eventos sociopolíticos, como éxitos o fracasos electorales. En dos estudios de campo a gran escala y tres experimentos, muestro que debido a que las marcas emocionantes reflejan de cerca la ideología política liberal, el éxito electoral del liberalismo puede aumentar las preferencias de los consumidores hacia las marcas emocionantes. Sin embargo, el fracaso electoral del liberalismo tiene el efecto contrario.

Las ideas de esta tesis son importantes y arrojan luz sobre lo que actualmente son los conjuntos de impulsores de las preferencias de marca de los consumidores que han sido poco

investigados. Además, debido a que, a menudo, los profesionales tienen un control limitado sobre los nuevos macro factores, los hallazgos de esta tesis ofrecen una guía necesaria sobre cómo los especialistas en marketing pueden reconocer, adaptar y aprovechar las macro presiones.

INTRODUCTION

What makes consumers prefer some brands over others? This question has been occupying the minds of researchers and practitioners for decades, and it remains at the top of scholars' and marketers' agendas (Aaker 1996; Aaker 1997; Bass and Talarzyk 1972; Cobb-Walgren et al. 1995; Kapferer 2008; Keller 1993; Wolfe 1942). Understanding the factors that impact brand preference is important, because brand preference can positively influence consumer purchase intentions (Cobb-Walgren et al. 1995), choice (Aaker 1996), word-of-mouth (Laczniak et al. 2001), loyalty (Oliver 1999), resistance to competitor brands (Thompson and Sinha 2008), and the overall success of both the brand and the firm (Aaker 1996; Keller 1998; Mizik and Jacobson 2008). As such, brand preference has been acknowledged as "an academic and professional cornerstone in the development of most branding strategies, applications, and measurements" (Schultz et al. 2014, p. 409).

Recent research suggests that consumers' brand preferences are often constructed, as opposed to being uncovered (Bettman et al. 1998; Lichtenstein and Slovic 2006; Bettman et al. 2008). This means that preferences are context-dependent to a great extent: Consumers form their preferences based on many situational factors (Hoeffler and Ariely 1999). For example, the specific information about a brand, the situation in which consumers evaluate brands, and even the broader socio-economic environment can impact which brand consumers would prefer at a given moment (Lichtenstein and Slovic 2006).

Marketers can shape some of these contextual variables to influence consumers' brand preferences. Specifically, many studies have focused on how *brand-related* or *consumer-related characteristics* can influence brand preference. For instance, literature on brand personality has established that human-like brand associations can impact consumers' brand preferences (Aaker 1997; Malär et al. 2011) and literature on brand naming has shown that the name of a brand can influence consumers' preferences (Keller et al. 1998; Klink 2001). Relatedly, recent literature on consumers' political orientations has demonstrated that the endorsement of a liberal or conservative political ideology can have profound effects on brand preference (Khan et al. 2013; Ordabayeva and Fernandes 2018). Marketers strive to affect consumers' brand preferences by creating brands with specific characteristics or by making salient consumer-related characteristics in the consumption context.

Yet, some of the contextual variables that can influence consumers' brand preferences cannot be shaped by marketers. Such *macro-level* drivers (e.g., the emergence of novel technologies, the arrival of a global pandemic or a presidential election) are seemingly

unrelated to branding but nevertheless can have important implications for consumers' preferences for brands (Whitler et al. 2021). For example, an emerging stream of literature suggests that new technological means of product development (Dai and Zhang 2019), global pandemics (Dunn et al. 2020), terrorist attacks (Ferraro et al. 2005) or political polarization (Weber et al. 2021) can affect consumer psychology and, thus, consumers' brand preferences. Despite these recent theoretical advances, our knowledge about how macro-level factors can drive consumers' brand preferences is incomplete. This thesis seeks to contribute to this literature and help fill this research gap.

Specifically, this thesis adds to the marketing literature by investigating *How macro-level factors influence consumers' preferences for brands*. In three chapters, each one focused on the influence of a prominent macro-level factor and inspired by a theoretically novel and practically important question, I investigate how new technological means of product development (i.e., crowdfunding), deadly incidents (i.e., terrorist attacks, global pandemics), and political events (i.e., presidential elections) can affect consumers' brand preferences. Together, the three themes explored in this thesis capture salient and increasingly important issues in understanding consumers' preferences for brands, which marketers need to anticipate and address.

Chapter 1 investigates the drivers of consumers' brand preferences in the context of crowdfunding. Crowdfunding has become a popular and effective way of financing new product development (Fleming and Sorenson 2016; Mollick 2014). Yet, relatively little is known about what factors can make consumers pledge more funding to new products on crowdfunding platforms.

In this chapter, I propose that non-semantic brand names (words that do not evoke a specific meaning, e.g., Leuf) can stimulate consumers' curiosity about a new product more than semantic brand names (words that evoke a specific meaning, e.g., Leaf). Because curiosity is an important motivation for individuals to fund crowdfunding campaigns (Chan et al. 2019; Herrero et al. 2019), non-semantic brand names can increase funding outcomes of new products on crowdfunding platforms. I tested these propositions in three studies. The first study used a large-scale, field dataset containing information about 6,487 Kickstarter campaigns. This study showed that new products with non-semantic (vs. semantic) names tend to raise more funding. Two additional studies—a survey and an experiment—provided evidence for a curiosity-based mechanism underlying the effect of non-semantic names on consumers' funding decisions.

Chapter 1 complements the marketing literature by qualifying its common prescription that brands can achieve better outcomes when using semantic names. In contrast, the findings of Chapter 1 demonstrate that non-semantic brand names may be more advantageous than semantic names in the crowdfunding context. Moreover, Chapter 1 adds to the marketing and crowdfunding literature by offering a curiosity-based framework for understanding consumers' brand preferences in the crowdfunding context. Finally, this chapter also offers practitioners actionable recommendations on how to brand new products on crowdfunding platforms.

Chapter 2 examines consumers' brand preferences in the context of large-scale events that can make consumers' mortality salient. From pandemic outbreaks to crimes and terrorism, brands often operate in environments in which consumers experience mortality salience (Greenberg et al. 1997; Dunn et al. 2020; Ferraro et al. 2005). As death is arguably the worst kind of change, a pervasive theme in many prior research findings is that individuals tend to avoid change when they experience mortality salience (Burke et al. 2013; Florian et al. 2002; Greenberg et al. 1997).

Building on this insight, I propose that mortality salience increases consumers' tendency to avoid change in consumption. Because brands with an exciting, but not other, personality are more closely associated with the notion of change, the onset of mortality salience tends to decrease consumers' preference for exciting, but not other, brands. I tested these propositions in four studies. The first study used a difference-in-differences methodology to show that the terrorist attack of 9/11 decreased consumers' preferences for brands with an exciting (but not other) personality. The second study replicated this effect using a controlled experimental method. The third study used the context of the COVID-19 pandemic and showed that consumers' tendency to avoid change mediated the influence of mortality salience on preferences for exciting brands. Finally, the fourth study further supported the underlying process by showing that experimentally reducing the degree of association between an exciting brand and the notion of change eliminated the negative effect of mortality salience.

Chapter 2 adds to the marketing literature by identifying a previously undocumented, detrimental effect of mortality salience on consumers' preferences for brands and an underlying process based on change avoidance. The findings of Chapter 2 also offer important managerial insights by highlighting the role that mortality salience-increasing events play in driving consumers' brand preferences and by suggesting a means through which marketers can overcome this negative effect (e.g., by reducing the association between exciting brands and the notion of change).

Chapter 3 investigates how major sociopolitical events, such as presidential elections, can impact consumers' preferences for brands. While the influence of consumers' own political leanings on brand preference is an emerging and increasingly popular research topic (Chan and Ilicic 2019; Khan et al. 2013; Ordabayeva and Fernandes 2018), little is known about how other factors related to political ideology can influence consumer behavior. This chapter focuses on one such factor: electoral success or failure.

I propose that brands with an exciting (but not other) personality are closely associated with the liberal political ideology. Because of this association, a liberal candidate's electoral success or failure can spill over to consumers' preferences for exciting brands. Specifically, electoral success on the liberal side tends to increase perceived popularity of liberal political ideology and hence consumers' preferences for brands with an exciting personality; electoral failure on the liberal side has the opposite effects. I tested these propositions in five studies. The first two studies used large-scale field data to examine how consumers' brand preferences changed during the 2004 and 2008 election cycles. These studies showed that electoral success of the liberal candidate in 2008 was associated with an increase in consumers' preferences for exciting (but not other) brands and that electoral failure of the liberal candidate in 2004 had the opposite effect. Two additional experimental studies provided evidence that exciting brands are associated with liberal ideology more closely than other brands, and that electoral success (vs. failure) of a liberal candidate increases (vs. decreases) the perceived popularity of exciting brands. Finally, an experimental study demonstrated that perceived popularity mediated the effect of electoral success (vs. failure) of a liberal candidate on consumers' preferences for exciting brands.

Chapter 3 complements the marketing literature by identifying how a novel political ideology-related construct (i.e., electoral successes or failures) can influence consumers' brand preferences and by revealing a popularity-based process that underlies this effect. Moreover, the findings of Chapter 3 provide important insights on managing exciting brands—widely prevalent and some of the most influential in the marketplace (Aaker et al. 2004)—in the times of politically charged events.

Overall, this thesis seeks to add to the marketing literature by offering a macro-level perspective on the drivers of consumers' brand preferences in the modern marketplace. By focusing on three important themes—the introduction of new technologies, the emergence of deadly threats, and the pressure of sociopolitical events—this thesis complements the current knowledge on macro-level drivers of consumers' brand preferences and the psychological mechanisms underlying this influence. The results of this research are consequential because

practitioners typically have limited (or no) control over the macro-level factors. Thus, scholarly guidance is needed to understand how marketers can recognize, adapt to, and take advantage of such large-scale market pressures. This thesis delivers such necessary insight into what brand managers can (or should) do differently today.

INTRODUCCIÓN

¿Qué hace que los consumidores prefieran algunas marcas sobre otras? Esta pregunta ha estado en la mente de investigadores y profesionales durante décadas, y permanece en la cima de las agendas de académicos y especialistas en marketing (Aaker 1996; Aaker 1997; Bass y Talarzyk 1972; Cobb-Walgreen et al. 1995; Kapferer 2008; Keller 1993; Wolfe 1942). Es importante comprender los factores que influyen en la preferencia de marca, porque la preferencia de marca puede influir positivamente en las intenciones de compra (Cobb-Walgreen et al. 1995), la selección (Aaker 1996), recomendaciones (Laczniak et al. 2001), la lealtad (Oliver 1999), la resistencia a las marcas de la competencia (Thompson y Sinha 2008) y el éxito general, tanto de la marca como de la empresa (Aaker 1996; Keller 1998; Mizik y Jacobson 2008). Como tal, la preferencia de marca ha sido reconocida como “una piedra angular académica y profesional en el desarrollo de la mayoría de las estrategias, aplicaciones y medidas de marca” (Schultz et al. 2014, p. 409).

Investigaciones recientes sugieren que, a menudo, las preferencias de marca se construyen, en lugar de ser descubiertas (Bettman et al. 1998; Lichtenstein y Slovic 2006; Bettman et al. 2008). Esto significa que las preferencias dependen en gran medida del contexto: los consumidores forman sus preferencias basándose en muchos factores situacionales (Hoeffler y Ariely 1999). Por ejemplo, la información específica sobre una marca, la situación en la que los consumidores evalúan las marcas, e incluso el entorno socioeconómico más amplio, pueden afectar qué marca preferirían los consumidores en un momento dado (Lichtenstein y Slovic 2006).

Los especialistas en marketing pueden dar forma a algunas de estas variables contextuales para influir en las preferencias de marca. Específicamente, muchos estudios se han centrado en investigar cómo las características de la marca o del consumidor pueden influir en la preferencia de marca. Por ejemplo, la literatura sobre la personalidad de la marca ha establecido que las asociaciones de marcas similares a las humanas pueden afectar las preferencias de marca (Aaker 1997; Malär et al. 2011) y la literatura sobre la denominación de marcas ha demostrado que el nombre de una marca puede influir en las preferencias de los consumidores (Keller et al. 1998; Klink 2001). Asimismo, la literatura reciente sobre las orientaciones políticas de los consumidores ha demostrado que el respaldo de una ideología política liberal o conservadora puede tener efectos profundos en la preferencia de marca (Khan et al. 2013; Ordabayeva y Fernandes 2018). Los especialistas en marketing se esfuerzan por

influir en las preferencias creando marcas con características específicas o destacando las características del consumidor en el contexto del consumo.

Sin embargo, los especialistas en marketing no pueden moldear algunas de las variables contextuales que pueden influir en las preferencias de marca. Dichos impulsores a nivel macro (por ejemplo, la aparición de tecnologías novedosas, la llegada de una pandemia mundial o una elección presidencial) aparentemente no están relacionados con la marca, pero aun así pueden tener implicaciones importantes para las preferencias de los consumidores (Whitler et al. 2021). Por ejemplo, una corriente emergente de literatura sugiere que los nuevos medios tecnológicos de desarrollo de productos (Dai y Zhang 2019), las pandemias globales (Dunn et al. 2020), los ataques terroristas (Ferraro et al. 2005) o la polarización política (Weber et al. 2021) pueden afectar la psicología del consumidor y, por lo tanto, las preferencias de marca. A pesar de estos avances teóricos recientes, nuestro conocimiento sobre cómo los macro factores pueden impulsar las preferencias de marca es incompleto. Esta tesis busca contribuir a esta literatura y ayudar a llenar este vacío de investigación.

Específicamente, esta tesis aporta a la literatura de marketing al estudiar cómo los macro factores influyen en las preferencias de los consumidores por las marcas. En tres capítulos, cada uno centrado en la influencia de un macro factor prominente e inspirado por una pregunta teóricamente novedosa e importante en la práctica, investigo cómo nuevos medios tecnológicos de desarrollo de productos (crowdfunding), incidentes mortales (ataques terroristas, pandemias globales) y eventos políticos (elecciones presidenciales) pueden afectar las preferencias de marca. Juntos, los tres temas explorados en esta tesis capturan problemas salientes y cada vez más importantes para comprender las preferencias de las marcas, que los especialistas en marketing deben anticipar y abordar.

El Capítulo 1 investiga los impulsores de las preferencias de marca en el contexto del crowdfunding. El crowdfunding se ha convertido en una forma popular y eficaz de financiar el desarrollo de nuevos productos (Fleming y Sorenson 2016; Mollick 2014). Sin embargo, se sabe relativamente poco sobre los factores que pueden hacer que los consumidores den más fondos para nuevos productos en plataformas del crowdfunding.

En este Capítulo, propongo que los nombres no semánticos (palabras que no evocan un significado específico, por ejemplo, Leuf) pueden estimular la curiosidad de los consumidores acerca de un nuevo producto más que los nombres semánticos (palabras que evocan un significado específico, por ejemplo, Leaf). Debido a que la curiosidad es una motivación importante para que las personas financien campañas de crowdfunding (Chan et al. 2019; Herrero et al. 2019), los nombres no semánticos pueden aumentar los resultados de

financiamiento de nuevos productos en plataformas de crowdfunding. Probé estas proposiciones en tres estudios. El primer estudio utilizó un conjunto de datos de campo a gran escala que contenía información sobre 6487 campañas de Kickstarter. Este estudio mostró que los nuevos productos con nombres no semánticos (en oposición a semánticos) tienden a recaudar más fondos. Dos estudios adicionales, una encuesta y un experimento, proporcionaron evidencia de un mecanismo basado en la curiosidad que subyace al efecto de los nombres no semánticos en las decisiones de financiación de los consumidores.

El Capítulo 1 complementa la literatura de marketing al condicionar su recomendación común de que las marcas pueden lograr mejores resultados cuando usan nombres semánticos. En contraste, los hallazgos del Capítulo 1 demuestran que los nombres no semánticos pueden ser más ventajosos que los nombres semánticos en el contexto del crowdfunding. Además, el Capítulo 1 aporta a la literatura de marketing y crowdfunding al ofrecer un marco basado en la curiosidad para comprender las preferencias de marca en el contexto del crowdfunding. Por último, este Capítulo también ofrece a los profesionales recomendaciones prácticas sobre cómo promocionar productos en plataformas del crowdfunding.

El Capítulo 2 examina las preferencias de marca en el contexto de eventos a gran escala que pueden resaltar la mortalidad de los consumidores. Desde los brotes pandémicos hasta los delitos y el terrorismo, las marcas a menudo operan en entornos en los que los consumidores experimentan mortalidad saliente (Greenberg et al. 1997; Dunn et al. 2020; Ferraro et al. 2005). Dado que la muerte es posiblemente el peor tipo de cambio, un tema generalizado en muchos hallazgos de investigaciones previas es que los individuos tienden a evitar el cambio cuando experimentan mortalidad saliente (Burke et al. 2013; Florian et al. 2002; Greenberg et al. 1997).

Sobre la base de esta idea, propongo que la mortalidad saliente aumenta la tendencia de los consumidores a evitar cambios en el consumo. Debido a que las marcas con personalidad emocionante, y no otras, están más estrechamente asociadas con la noción de cambio, la mortalidad saliente tiende a disminuir la preferencia por las marcas emocionantes. Probé estas proposiciones en cuatro estudios. El primer estudio utilizó una metodología de diferencias en diferencias para mostrar que el ataque terrorista del 11 de septiembre disminuyó las preferencias por las marcas con personalidad emocionante (y no otras). El segundo estudio replicó este efecto utilizando un método experimental controlado. El tercer estudio utilizó el contexto de la pandemia de COVID-19 y mostró que la tendencia de los consumidores a evitar el cambio medió la influencia de la mortalidad saliente en las preferencias por marcas emocionantes. Finalmente, el cuarto estudio apoyó aún más el proceso subyacente al mostrar

que la reducción experimental del grado de asociación entre una marca interesante y la noción de cambio eliminó el efecto negativo de la mortalidad saliente.

El Capítulo 2 aporta a la literatura de marketing al identificar un efecto perjudicial previamente indocumentado de la mortalidad saliente en las preferencias por las marcas y un proceso subyacente basado en la evitación de cambios. Los hallazgos del Capítulo 2 también ofrecen importantes conocimientos de gestión al destacar el papel que desempeñan los eventos que aumentan la prominencia de la mortalidad al impulsar las preferencias de marca y al sugerir un medio a través del cual los especialistas en marketing pueden superar este efecto negativo (reduciendo la asociación entre marcas emocionantes y la noción de cambio).

El Capítulo 3 investiga cómo los principales eventos sociopolíticos, como las elecciones presidenciales, pueden afectar las preferencias por las marcas. Si bien la influencia de las propias inclinaciones políticas de los consumidores sobre la preferencia de marca es un tema de investigación emergente y cada vez más popular (Chan e Ilicic 2019; Khan et al.2013; Ordabayeva y Fernandes 2018), se sabe poco sobre cómo otros factores relacionados con la ideología política pueden influir en el comportamiento del consumidor. Este Capítulo se centra en uno de esos factores: el éxito o el fracaso electoral.

Propongo que las marcas con personalidad emocionante (y no otras) están estrechamente asociadas con la ideología política liberal. Debido a esta asociación, el éxito o el fracaso electoral de un candidato liberal puede extenderse a las preferencias por marcas emocionantes. Específicamente, el éxito electoral del liberalismo tiende a aumentar la popularidad percibida de la ideología liberal y, por lo tanto, las preferencias por marcas con personalidad emocionante; mientras que el fracaso electoral del liberalismo tiene los efectos opuestos. Probé estas proposiciones en cinco estudios. Los dos primeros estudios utilizaron datos de campo a gran escala para examinar cómo cambiaron las preferencias de marca durante los ciclos electorales de 2004 y 2008. Estos estudios mostraron que el éxito electoral del candidato liberal en 2008 se asoció con un aumento en las preferencias por las marcas emocionantes (y no otras) y que el fracaso electoral del candidato liberal en 2004 tuvo el efecto contrario. Dos estudios experimentales adicionales proporcionaron evidencia de que las marcas emocionantes están asociadas con la ideología liberal más estrechamente que otras marcas, y que el éxito electoral (en contraposición con el fracaso) de un candidato liberal aumenta (disminuye) la popularidad percibida de las marcas emocionantes. Finalmente, un estudio experimental demostró que la popularidad percibida medió el efecto del éxito electoral (en contraposición con el fracaso) de un candidato liberal en las preferencias por marcas emocionantes.

El Capítulo 3 complementa la literatura de marketing identificando cómo una nueva construcción relacionada con la ideología política (éxitos o fracasos electorales) puede influir en las preferencias de marca y revelando un proceso basado en la popularidad que subyace a este efecto. Además, los hallazgos del Capítulo 3 brindan información importante sobre la gestión de marcas emocionantes—ampliamente prevalentes y algunas de las más influyentes en el mercado (Aaker et al. 2004)—en tiempos de eventos con carga política.

En general, esta tesis busca agregar a la literatura de marketing al ofrecer una macro perspectiva sobre los impulsores de las preferencias de marca en el mercado moderno. Al centrarse en tres temas importantes, la introducción de nuevas tecnologías, la aparición de amenazas mortales y la presión de los eventos sociopolíticos, esta tesis complementa el conocimiento actual sobre los macro impulsores de las preferencias de marca y los mecanismos psicológicos que subyacen a esta influencia. Los resultados de esta investigación son importantes pues los profesionales generalmente tienen un control limitado (o nulo) sobre los macro factores. Por lo tanto, se necesita una orientación académica para comprender cómo los especialistas en marketing pueden reconocer, adaptar y aprovechar las presiones del mercado a gran escala. Esta tesis ofrece una visión necesaria de lo que los gerentes de marca pueden (o deberían) hacer de manera diferente en la actualidad.

CHAPTER I.

THE IMPACT OF NEW PRODUCT NAMES ON BRAND PREFERENCE ON CROWDFUNDING PLATFORM

The name of a new product¹ can substantively impact product success (Aaker 2007; Brexendorf, Bayus, and Keller 2015; Klink and Athaide 2010). Practitioners have argued that “what’s in a name is everything—a product is not a brand until you name it” (Opatow 1985, p. 254) and scholars have maintained that a name choice is “the most important marketing decision [practitioners] can make” (Robertson 1989, p. 61). This is because names can have a direct, positive influence on the preference (Aaker 2007; Keller, Heckler, and Houston 1998) and performance (Aaker and Jacobson 2001; Alter and Oppenheimer 2006; Wu et al. 2019) of branded products. Accordingly, practitioners often consider the choice of a new product name to be a crucial component of a marketing strategy (Keller et al. 1998).

Given the important implications of choosing the “right” name for a new product, it might seem prudent to follow the common prescription of the marketing literature, which is to choose a name that evokes a specific meaning (Keller 1993 2003; Keller et al. 1998; Klink 2001; Robertson 1989), for example, Red Bull, Tide, or Gap. Yet, contrary to this recommendation, products are sometimes given names that do not evoke a specific meaning, for example, Spotify, Etsy, or Zillow. In other words, when introducing new products to the market, some product developers seem to believe that product names that do not evoke a specific meaning can be advantageous. However, when this is actually the case remains relatively unclear in the literature. Perhaps because the marketing literature strongly advocates the use of names that evoke a specific meaning, little is known about how names that do not evoke a specific meaning might impact the success of new product development. This research helps address this research gap by examining why and in what context product names that do not evoke a specific meaning can be more beneficial than those that evoke a specific meaning.

The conceptual framework distinguishes non-semantic names (i.e., those that do not evoke a specific meaning, e.g., Leuf) and semantic names (i.e., those that evoke a specific meaning, e.g., Leaf). Building on research in cognitive psychology, I propose that compared to semantic names, non-semantic names are more likely to arouse feelings of curiosity. This is because non-semantic names have not been encountered before, lack specific meaning, feel

¹ For the sake of simplicity, I use the term “product;” however, our theorizing and empirical work are applicable broadly to goods—that is, products and services newly introduced to the market.

peculiar, and are not understood, and these characteristics are known to stimulate curiosity (Berlyne 1954; Litman and Jimerson 2004; Loewenstein 1994). I further argue that the curiosity-arousing feature of non-semantic names can be more advantageous in contexts where curiosity is particularly influential, such as when funding new products through crowdfunding platforms. Prior research has shown that crowdfunding has become one of the most important means of raising capital for new product development (Fleming and Sorenson 2016; Mollick 2014; Zhang and Chen 2019) and that curiosity is one of some important motivations for individuals to fund crowdfunding campaigns (Chan et al. 2019; Herrero, Hernandez-Ortega, and Martin 2019). Curiosity motivates individuals to seek more information about the object of interest and process this information more deeply, which increases the persuasiveness of compelling information (Kashdan and Silvia 2009; Kupor and Tormala 2015). Because backers (i.e., individuals providing financial support on crowdfunding platforms) who are more persuaded are more likely to provide funding (Allison et al. 2017), non-semantic names can increase new products' funding outcomes. Thus, I propose that by stimulating curiosity, non-semantic names can make backers pledge more funding. I summarize the propositions and conceptual framework in Figure 1.

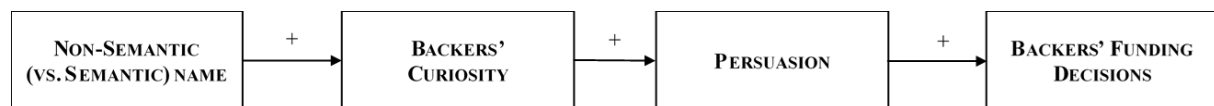


Figure 1.1. Conceptual model

I examined these propositions in three studies that employed different empirical methods. In Study 1, I analyzed a large-scale, field dataset containing information about 6,487 Kickstarter campaigns from 22 countries. Consistent with the propositions, I found that in my dataset, new products with non-semantic names collected, on average, 15.8% more funds than new products with semantic names. This effect was larger for crowdfunding campaigns that used more (vs. less) compelling information. I complemented this field study with a survey and an experimental study that offered evidence for a curiosity-based mechanism underlying the effect of non-semantic names on new product funding outcomes. This multi-study, multi-

method approach allowed to triangulate the findings and establish their reliability, validity, and generalizability.

This research adds to the marketing literature on naming (Keller et al. 1998; Klink 2001; Wu et al. 2019) by investigating product naming effects in the context of crowdfunding the development of new products. Prior research has shown that the traditional marketing playbook may not be always applicable for new product development because of some of the unique characteristics of new products (Brexendorf et al. 2015; Klink and Athaide 2010). In line with this research, the findings demonstrate that, for new products that seek funding on crowdfunding platforms, semantic names can be disadvantageous, unlike what the marketing literature often suggests. This results also complement research about new product development and crowdfunding (Dai and Zhang 2019; Zhang and Chen 2019) by offering a curiosity-based framework for understanding backers' decision-making process and new product crowdfunding outcomes. The theoretical contributions of the research offer practical and cost-effective recommendations that product developers can follow to create more viable crowdfunding campaigns, brand their new products more successfully, and stimulate backers' curiosity more strongly. I provide a more detailed discussion of the main theoretical contributions and managerial implications in the general discussion section.

Conceptual Background and Hypotheses

The Importance of New Product Names

Choosing a name for a new product is a crucial element of a marketing strategy (Danesi 2011; Keller et al. 1998; Klink and Athaide 2010; Opatow 1985). Without a name, other marketing elements, such as logos or advertising, can hardly be effective (Danesi 2011). Moreover, changing a product name once the product is launched is difficult; “a package, price, or advertising theme usually can be changed much more easily than a name” (Aaker 1991, p. 188). Choosing the ‘right’ product name is also important because an effective name can translate into substantial performance and competitive advantages not only in more traditional marketing contexts (Keller et al. 1998; Skorinko et al. 2006), but also in the context of new, innovative products (Aaker 1991; Kohli, Harich, and Leuthesser 2005; Klink and Athaide 2010).

The positive effects of new product names often arise because people tend to form strong associations with a name, even if they are seeing it for the first time (Peterson and Ross 1972). These associations, in turn, can influence individual's perceptions about a product (Keller 1993). Such associations often emerge automatically, without individuals' deliberate effort (Yorkston and Menon 2004). For instance, people automatically perceive new product names that combine numbers and letters to be more scientific and high-tech (Pavia and Costa 1993), names that are fluent to be more familiar (Alter and Oppenheimer 2006), and names that feel difficult to pronounce to be more innovative (Chan, Park, and Patel 2018). Based on a name, individuals can also effortlessly infer what physical characteristics of a new product are going to be like. For example, an ice cream named 'Frosh' appears creamier, richer, and smoother than an ice cream named 'Frish' (Yorkston and Menon 2004), and the name 'LifeLong luggage' leads to perceptions that the luggage will be durable (Keller et al. 1998). People also automatically think that some names (e.g., "whumies") are more suitable for specific product categories (e.g., cereal) than others (e.g., "nemlads"; Peterson and Ross 1972). Finally, individuals can automatically associate new product names with intangible characteristics. For example, names with back vowels (e.g., Bilan) increase perceptions of a rugged brand personality, whereas names with front vowels (e.g., Bulan) increase perceptions of a sincere and sophisticated brand personality (Klink and Athaide 2012). In sum, prior literature has shown that product names and their characteristics can have important effects on individuals' perceptions and decision-making, and oftentimes exert these effects in a manner that is automatic and effortless for an individual. This conceptual framework aligns with this evidence: I also view product names as marketing elements that exert an automatic influence on individuals' perceptions and decisions.

Semantic and Non-Semantic New Product Names

The semantic characteristics of names—those related to meaning—are some of the most basic and important features of names and thus have been extensively studied in prior literature (Arora, Kalro, and Sharma 2015; Klink 2001; Kohli and Suri 2000; Kohli et al. 2005; Lerman and Garbarino 2002; Wu et al. 2019; Zaichkowsky 2010).² The conceptual framework builds on a recent conceptualization by Baskin and Liu (2021) to define non-semantic new

² Prior research has used different terms to refer to semantic characteristics of product names, such as meaningful and meaningless (Kohli et al., 2005); words and nonwords (Lerman and Garbarino, 2002); descriptive and non-descriptive (Zaichkowsky, 2010); semantic and invented (Arora et al., 2015).

product names as those that lack specific meaning and thus are not understood (e.g., “Leuf”), and semantic names as those that evoke specific meaning and thus are understood (e.g., “Leaf”).³

A typical recommendation in the marketing literature is to give a new product a semantic name (Hillenbrand et al. 2013; Keller 1993, 2003; Keller et al. 1998; Kohli et al. 2005; Klink 2001; Robertson 1989). This recommendation can be supported by several reasons. First, semantic names can assist in building brand knowledge and brand equity by suggesting associations when none exist, which is the case for new products (Keller 2003; Kohli and Suri 2000). Second, semantic names can provide individuals with inferential cues about product benefits and as such, increase recall of such benefits (Keller et al. 1998). For example, the “Whole Foods” name suggests that consumers will find natural and unprocessed foods in the store. Third, because semantic names evoke a specific meaning, they can be perceived as more familiar and typical, and these features can favorably impact consumer attitudes (Zinkhan and Martin 1987) and market outcomes (Alter and Oppenheimer 2006).

Despite these reasons for using semantic names, product developers sometimes give new products non-semantic names such as Spotify, Etsy, or Zillow. There are limited research findings suggesting that in some contexts such naming strategy can be beneficial. First, Klink and Athaide (2010) have found that highly innovative consumers prefer novel product names to brand extension names. Second, in a study of new venture (corporate) names, Chan et al. (2018) have demonstrated that linguistically disfluent names (e.g., infrequently used English words) can increase the likelihood that a new venture collects the requested amount of funding. Finally, Baskin and Liu (2021) have shown that when choosing products for a friend with highly unconventional tastes, consumers rate products described with no-meaning words to be more expensive and high-quality because such products are less typical of their product category. These works suggest that non-semantic names can result in favorable outcomes in certain contexts. However, there still is a need for a more complete understanding of when non-semantic names can be beneficial and what are the processes underlying the effects of non-semantic names. I help fill this research gap by proposing that a common theme behind prior findings—from individuals’ innovativeness to new ventures to having unconventional tastes—

³ As in Baskin and Liu (2021), I focus on words’ ability to evoke meaning both in isolation and in context. That is, individuals should be able to understand the meaning of a semantic name even if it is used in an atypical way in the context (e.g., “monster green” for a paint or “Apple” for a technology company). Similarly, I conceptualize names that are not English words or less frequently used English words (i.e., linguistically disfluent; Chan et al., 2018) but evoke a specific meaning as semantic because individuals are able to understand their meaning (e.g., CleanseBud or Xtend).

is how influential curiosity is to this context. One of such contexts is crowdfunding, a context in which product developers often seek funds for new product development.

New Product Development and Crowdfunding

Crowdfunding has become a popular and effective alternative to traditional forms of financing new product development (Fleming and Sorenson 2016; Zhang and Chen 2019). In traditional funding methods, new product developers strive to persuade a small number of sophisticated, expert investors to provide sizable amounts of capital. In contrast, in crowdfunding, new product developers pitch their ideas to the “crowd”—a large audience of investors who are often nonprofessional and less experienced, and who contribute small amounts of money in exchange for a future product, recognition, or equity (Fleming and Sorenson 2016). Crowdfunding allows new product developers to obtain wider access to funds and gives interested individuals (“backers”) the possibility to reap the benefits of investing. New product developers most often choose a reward-based crowdfunding model, such as the one enabled by Kickstarter, in which backers typically receive a developed product in return for their investment (Zhang and Chen 2019). To obtain funding, new product developers design appealing, attention-grabbing crowdfunding campaigns to entice backers to pledge money. Accordingly, backers on reward-based crowdfunding platforms often behave as consumers looking to purchase a product that aroused their interest and are often the first consumers of the new product (Bitterl and Schreier 2018; Rose et al. 2020; Zhang and Chen 2019).

A reward-based model of crowdfunding has several features that distinguishes it from other crowdfunding models or more traditional investment contexts and makes backers’ curiosity particularly influential. First, reward-based crowdfunding platforms like Kickstarter often act as an open, competitive market for innovations, where new product developers bring their original ideas and let the market sift out viable products. As such, many reward-based crowdfunding campaigns are based on the idea of a new product or new products at an early stage of development. Thus, backers often possess the curiosity of the first, early adopters of innovations (Stanko and Henard 2017) and the challenge of new product developers is to make backers interested enough in the product to fund it (Zhang and Chen 2019). Second, new products are typically available exclusively on a specific reward-based crowdfunding platform (Kickstarter 2021), instigating perceptions of uncommonness and originality. Moreover, because backers tend to value innovativeness, they also tend to reward campaigns that feature unique, original, and novel marketing elements (Mahmood, Luffarelli, and Mukesh 2019).

These features of crowdfunding campaigns offer a fertile ground for curiosity (Spielberger and Starr 1994). Finally, backers on reward-based crowdfunding are typically motivated by exploratory motives and intrinsic factors, such as curiosity and interest (Chan et al. 2019; Herrero et al. 2019; Hou, Li, and Liu 2020). Overall, these unique characteristics of reward-based crowdfunding underscore the important role that backers' curiosity plays on these platforms. The conceptual framework posits that this relative importance of curiosity in the crowdfunding context can contribute to the different effects that non-semantic names have on crowdfunding platforms than in more traditional marketing contexts.

New Product Names and Crowdfunding

The decision-making process of backers can be substantively different than that of expert investors. Instead of seeking to evaluate campaign characteristics that provide relevant information about the quality or potential profitability of a new product rationally and methodically, backers often use simple decision-making processes and rely on heuristics or mental shortcuts (Allison et al. 2017; Chan and Park 2015; Mahmood et al. 2019). As such, campaign characteristics that provide little relevant information about a new product's quality or potential profitability can influence backers' funding decisions. These characteristics include for example, pitch linguistic style (Anglin et al. 2018) and emotionality (Davis et al. 2017), business plan colors (Chan and Park 2015), and logo design (Mahmood et al. 2019).

Several reasons suggest that new product names can likewise impact backers' funding decisions in the reward-based crowdfunding context. Typically, new product names are prominently displayed on crowdfunding platforms (for examples, see Figure A1 in the Appendix). When backers explore a campaign preview, the new product name is typically the first piece of information that backers cognitively process. The name is also frequently reiterated in different campaign materials (e.g., on an individual page of the campaign, in the reward descriptions, and in visual materials such as logos). Because information to which individuals are frequently exposed to tends to affect individuals' judgments and decision-making (Schwarz 2004), new product names should influence backers' decisions. In addition, new product names are typically printed in a bigger font than other pieces of information, which attracts attention (Bayer et al. 2012), and information that draws attention tends to be disproportionately influential in individuals' decision-making process (Orquin and Loose 2013). Together, these reasons strongly suggest that new product names can influence backers' decision-making. In the next section, I integrate the literatures discussed previously to present

formal hypotheses about how curiosity can drive crowdfunding outcomes of new products with non-semantic names.

New Product Names and Crowdfunding Outcomes: A Curiosity-Based Mechanism

I propose that non-semantic names can positively affect crowdfunding outcomes of new products because non-semantic names are more likely to stimulate backers' curiosity than semantic names. This proposition is based on the literature in cognitive psychology, which recognizes curiosity as a fundamental human motive driving much of human behavior (Berlyne 1954; Loewenstein 1994). Formally, curiosity is "a desire for new information aroused by novel, complex, or ambiguous stimuli" (Litman and Jimerson 2004, p. 147). In other words, people tend to experience curiosity when encountering something new, odd, or confusing. Compared to semantic, non-semantic names can be perceived as more novel, odd, and confusing because they have not been encountered before, lack specific meaning, feel peculiar, and are not understood. As such, non-semantic names should have greater potential to stimulate backers' curiosity.

As discussed previously, curiosity is important and influential in the context of reward-based crowdfunding, suggesting that the curiosity-arousing feature of non-semantic names can be impactful when funding new product development through crowdfunding platforms. When coming across curiosity-arousing stimuli, individuals perceive a knowledge gap between what they currently know and what they want to know (Loewenstein 1994). This creates an unpleasant feeling of information deprivation that individuals are motivated to eliminate. As such, curiosity drives people to remove ignorance or uncertainty by seeking additional, relevant information that adequately fills the perceived knowledge gap (Litman 2008; Litman and Silvia 2006). In fact, individuals can become absorbed in learning more about the object of their interest when feeling curious, as they seek more information about it and explore additional arguments (Kashdan and Silvia 2009). Moreover, by encouraging deeper, more thorough processing of information, curiosity can increase the persuasiveness of the acquired compelling, pertinent information (Kashdan and Silvia 2009; Kupor and Tormala 2015).

The effects of curiosity have important marketing implications. For example, curiosity stimulated by new product advertising can increase consumers' attention to product information, enhance consumers' memory for new product benefits (Menon and Soman 2002), and improve purchase intentions (Hill, Fombelle, and Sirianni 2016). Curiosity aroused by new products that are incongruent with existing product portfolio can boost consumer engagement

(Gerrath and Biraglia 2021). In fact, simply adding a label “new” to product packaging can be enough to stimulate consumer curiosity and increase purchase intentions (Eelen, Verlegh, and van den Bergh 2015). In the current research context, having their curiosity stimulated by a non-semantic new product name, backers may examine information about the new product in a more engaged, dedicated fashion. In turn, such increased information processing can make backers more persuaded by compelling information about the new product, leading backers to pledge more funding. More formally, I predict:

Hypothesis 1. Backers tend to **(a)** pledge more funding to new products with non-semantic (vs. semantic) names. **(b)** This occurs because non-semantic (vs. semantic) names tend to stimulate backers’ curiosity more, which, in turn, makes backers more persuaded by compelling new product information.

The conceptual model is depicted in Figure 1. In what follows, I present the results of three studies that tested the predictions. I first tested H1a using a large-scale dataset containing information about 6,487 Kickstarter campaigns from 22 countries (Study 1). This study also investigated the sensitivity of the effect to the quality of information about a new product and showed that the effect of non-semantic names was larger for crowdfunding campaigns that used more (vs. less) compelling information. Next, I examined an underlying mechanism and tested H1a–H1b in two studies: a survey-based study (Study 2a) and a controlled experiment (Study 2b). Overall, across the studies, I used several research methods, campaign-level and individual-level data, and varied non-semantic and semantic new product names. This multi-study, multi-method approach enabled me to triangulate the findings and demonstrate their reliability, validity, and generalizability.

Study 1: The Effect of Non-Semantic New Product Names on Crowdfunding Outcomes

In this study, I used a field dataset containing information about 6,487 reward-based crowdfunding campaigns on Kickstarter to examine whether new products with non-semantic names collect more funding than new products with semantic names (H1a), and whether this effect might be sensitive to the quality of the information about a new product.

Data and Sample

I collected the data on March 31, 2019, using a custom-written, automated algorithm. This algorithm gathered information about technology reward-based crowdfunding campaigns available on Kickstarter on the day of data collection. As in previous studies (Chan et al. 2020; Mollick and Kuppusswamy 2014; Rose et al. 2020), I focused on the technology category because campaigns in this category tend to be novel and more typical of new product developments. Furthermore, technology is one of the most important categories on Kickstarter in terms of total amount of dollars invested (Kickstarter 2021). Table 1 provides summary statistics and pairwise correlations for the variables in the dataset. Table 2 provides additional information about the sample.

The characteristics of my sample were comparable to those of samples used in previous research, attesting to the quality of the data. For instance, the average amount of funding requested, the average duration of the campaigns, and span of campaigns' geographical location were comparable to those reported in previous reward-based crowdfunding studies (Chan et al. 2020; Oo et al. 2019; Zhang and Chen 2019; see Table 1). However, my sample contained a higher proportion of campaigns that reached (vs. did not reach) their funding goal than in previous studies (Allison et al. 2017; Oo et al. 2019). I accounted for this characteristic of the sample in the analyses.

Variables

Dependent variable. The dependent variable (*Funds collected*) was the natural logarithm of the amount of funds collected by a campaign. I used a $\ln(\text{Funds collected} + 1)$ transformation to normalize the distribution of the residuals and accommodate zero values. Log-transformations are often used to address the skewed nature of crowdfunding data (Anglin et al. 2018; Mahmood et al. 2019; Rose et al. 2020; Scheaf et al. 2018). When campaigns raised money in currencies other than U.S. dollars (e.g., euros), I converted the amount raised into U.S. dollars by using the exchange rate in effect on the date the campaign concluded.

Although product developers received the funds only if their campaigns met the specified funding goal, Kickstarter displays the amount of funds collected even if a campaign did not reach its goal. Thus, the dependent variable allowed for a nuanced and informative estimate that did not suffer from data censorship, a common problem in data analysis (for a discussion, see Wooldridge 2010). Furthermore, using a continuous measure helped to clearly

identify the extent to which campaigns exceeded or fell short of their funding goals. This continuous measure of investors' funding decisions is thus advantageous and as such often used in previous studies based on Kickstarter samples (Anglin et al. 2018; Johnson, Stevenson, and Letwin 2018; Rose et al. 2020; Zhang and Chen 2019).

Independent variable. the independent variable (*Non-semantic name*) was a binary variable that took a value of 1 when the name of a new product was non-semantic (e.g., "Leuf") and a value of 0 when it was semantic (e.g., "Leaf"). I created this variable with manual coding: For the list of 6,487 campaign titles (but no other data and information), I coded each title according to whether it featured a new product name that was non-semantic or semantic (the variable was coded as missing when the campaign title was an explanatory sentence that did not include a new product name [e.g., "Food waste to energy converter;" n = 1,331]). An example of the coding scheme is available in Table A1 in the Appendix.

The author's coding was checked and validated by two independent coders. Two research assistants blind to the purpose of the study coded the same sub-sample of 250 randomly chosen campaign titles. The intraclass correlation coefficient indicated good intercoder reliability (ICC = .84; 95% CI = [.81; .87]; for a discussion, see Koo and Li 2016) and was comparable to ICCs reported in previous crowdfunding research (Rose et al. 2020; Scheaf et al. 2018).

Control variables. I controlled for campaign characteristics that previous research identified as important predictors of campaign performance on Kickstarter (Anglin et al. 2018; Chan et al. 2020; Mollick 2014; Rose et al. 2020; Zhang and Chen 2019). Funds requested (i.e., the amount a new product developer sought to raise) and Duration (i.e., the time elapsed between a campaign's launch and deadline) captured the design of a campaign, uniquely determined by new product developers. I controlled for the popularity of a campaign by including two measures: *Backers* (i.e., the number of backers who invested in a given campaign) and *Reached the goal* (i.e., a binary variable that took a value of 1 when a campaign reached the amount a new product developer sought to raise and a value of 0 when the campaign did not reach that amount). To capture campaign quality, I controlled for *Staff pick* (i.e., a binary variable that took a value of 1 when a campaign was endorsed by Kickstarter and a value of 0 when it was not). To capture the presentation modes, I controlled for *Video* (i.e., a binary variable that took a value of 1 when a campaign included a promotional video and a value of 0 when the campaign did not). I also controlled for the effect of a new product's country of origin by including binary indicator variables for each country. Last, I included fixed effects of a new product's sub-category (e.g., gadgets or software development).

Table 1.1. Study 1: Descriptive Statistics and Pairwise Correlations

Variables	(1)	(2)	(3)	(4)	(5)	(6)	(7)	Mean	Std. Dev.	Min.	Max.
(1) Non-semantic name (0/1)								.30	.46	0	1
(2) Funds collected (log+1)*								9.14	2.92	0	15.64
* <i>Funds collected in USD</i>	.09***							100,941	343,014	0	8,372,400
(3) Funds requested (USD)	.01	.01						42,112	216,716	1	10,000,000
(4) Reached the goal (0/1)	.06***	.67***	-.10***					.86	.35	0	1
(5) Backers (number of investors)	.01	.30***	.06***	.11***				638	2,364	0	105,857
(6) Staff pick (0/1)	.03*	.35***	.05***	.20***	.15***			.23	.42	0	1
(7) Video (0/1)	.04**	.43***	.03*	.26***	.08***	.15***		.88	.32	0	1
(8) Duration (days)	.03*	.08***	.04***	-.05***	.06***	.03**	.03*	34.49	10.83	2.87	90.04

Notes. † $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$.

Table 1.2. Study 1: Sample Description Per Country and Sub-Category

Country	Frequency	Proportion (%)	Sub-category	Frequency	Proportion (%)
Austria	25	.39	3D Printing	234	3.61
Australia	171	2.64	Apps	526	8.11
Belgium	10	.15	Camera equipment	198	3.05
Canada	329	5.07	DIY electronics	375	5.78
Switzerland	42	.65	Fabrication tools	61	.94
Germany	150	2.31	Flight	65	1.00
Denmark	32	.49	Gadgets	934	14.4
Estonia	57	.88	Hardware	1,076	16.59
France	124	1.91	Makerspaces	68	1.05
United Kingdom	575	8.86	Robots	202	3.11
Hong Kong	122	1.88	Software	414	6.38
Ireland	25	.39	Sound	269	4.15
Italy	82	1.26	Space exploration	107	1.65
Japan	14	.22	Technology	1,261	19.44
Luxembourg	1	.02	Wearables	361	5.56
Mexico	29	.45	Web	336	5.18
Netherlands	104	1.6			
Norway	17	.26			
New Zealand	42	.65			
Sweden	33	.51			
Singapore	27	.42			
United States	4,476	69			

Analyses and Results

Model specification. I estimated the following model:

$$(1.1) \text{ Funds collected}_i = \beta_0 + \beta_1 \text{Non-semantic name}_i + \gamma \mathbf{X}_i + \delta + \omega + \varepsilon_i,$$

where i denotes a campaign, β_0 is the intercept, β_1 is the coefficient capturing the impact of the non-semantic new product name on the amount of funds collected by the campaign, \mathbf{X}_i is the vector of control variables mentioned previously, δ is the vector of coefficients for the indicator variables capturing the effect of the new products' countries of origin, ω denotes the fixed effects of the new products' sub-categories, and ε_i is the error term. I estimated this model using a fixed-effects regression with errors clustered at the sub-category level. Multicollinearity problems were not detected (mean variance inflation factor (VIF) = 4.29).

Main results. The results of the analyses are reported in Table 3. In support of H_{1a}, I found a positive and statistically significant association between *Non-semantic name* and *Funds collected* ($\beta = .158$, $t(5,156) = 3.04$, $p = .008$; see Table 3, Model 1). Because I estimated a log-level regression, this result suggests that new products with non-semantic names collected, on average, 15.8% more funds than new products with semantic names. To put this number in perspective, giving a non-semantic name to a new product can be associated with an additional USD 15,949 collected for the average campaign in my sample. According to the results, the impact of a non-semantic new product name was greater than the impact of other important predictors of backers' funding decisions. For instance, *Duration* was positively associated with *Funds collected* ($\beta = .015$, $F(1, 5112) = 6.86$, $p < .001$), as was *Backers* ($\beta = .001$, $F(1, 5112) = 9.08$, $p < .001$). However, a series of coefficient equality tests revealed that both associations were statistically significantly smaller than the association between *Non-semantic name* and *Funds collected* (all Fs > 7.60 and ps < .01).

Table 1.3. Study 1: The Effect of Non-Semantic New Product Names on Backers' Funding Decisions

	Model 1		Model 2		Model 3		Model 4		Model 5	
	Main model		Robustness: Winsorized DV		Robustness: Dictionary Coding		Robustness: "No name" included as semantic names		Is the effect sensitive to the quality of information?	
	β	SE	β	SE	β	SE	β	SE	β	SE
Non-semantic name	.158**	.052	.157**	.052	.312***	.060	.315***	.072	.133***	.031
Funds requested	.001	.001	.001	.001	.001	.001	.001	.001	0.001***	.001
Reached the goal	4.25***	.302	4.26***	.301	4.29***	.238	4.29***	.239	-	-
Backers	.001***	.001	.001***	.001	.001**	.001	.001**	.001	.001**	.001
Staff pick	1.01***	.037	1.01***	.037	1.12***	.114	1.12***	.056	.897***	.047
Video	1.89***	.125	1.89***	.126	1.87***	.114	1.87***	.109	1.46***	.193
Duration	.015***	.002	.015***	.002	.019***	.002	.019***	.002	.019***	.002
Country effects	Yes		Yes		Yes		Yes		Yes	
Sub-category fixed effects	Yes		Yes		Yes		Yes		Yes	
<i>Non-semantic name</i> × <i>Staff pick</i>									.125**	.043
Within-R ²	.564		.560		.567		.566		.363	
Between-R ²	.894		.893		.880		.872		.771	
Overall R ²	.626		.622		.617		.616		.384	
n observations	5,156		5,156		6,487		6,485		4,447	

Notes. The bolded variable is our variable of interest. Estimates for the effects of country are available on request from the authors.

† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$.

Robustness tests. I explored whether the results were robust to alternative (a) estimation approaches, (b) operationalizations of the independent variable, and (c) sampling decisions. The results of these tests were consistent with the findings of the main model (see Table 3, Models 2–4 and Figure A2 in the Appendix). First, I explored alternative estimation approaches. To address potential concerns about extreme values, I estimated a model predicting *Funds collected* after winsorizing the dependent variable at the 99th percentile (see Table 3, Model 2).⁴ Second, I sought to provide evidence that the main findings cannot be explained by choices made during the manual coding process of the independent variable. I specified a variable, *Non-semantic dictionary*, computed with the help of an automated word recognition algorithm (see Table 3, Model 3). This algorithm compared the words in campaign titles to the words available in the Microsoft built-in thesaurus and returned words unavailable in the thesaurus. Accordingly, the variable *Non-semantic dictionary* was a binary variable that took a value of 1 when a crowdfunding campaign’s title contained at least one word that was not available in the thesaurus and a value of 0 when a crowdfunding campaign’s title contained words that were all available in the thesaurus. It is important to note that, although this approach has some advantages, it can result in misclassification of some new product names because of the unintentional misspellings or inclusion of words that do not constitute a new product name. Third, I explored the influence of the sampling decisions. As stated previously, I excluded data on 1,331 campaigns from the main analysis because the titles of these campaigns were explanatory sentences that did not include a new product name. To show that the findings were not a byproduct of this decision, I estimated a model that included these campaigns. I assigned them to the semantic new product name category (i.e., *Non-semantic name* = 0) because their titles had meanings. As shown in Table 3 (Model 4), I found a positive and statistically significant association between *Non-semantic name* and *Funds collected*, even when these campaigns were included in the sample.

Do More Persuasive Campaigns Benefit More from Non-Semantic New Product Names?

Although product developers typically strive to present compelling information about their new products, some campaigns include more compelling information than others (Allison et al. 2017; Davis et al. 2017). The curiosity-based mechanism posits that new products with non-semantic (vs. semantic) names tend to collect more funding because increased curiosity

⁴ Winsorizing at the 95th percentile produced similar results.

can drive backers to become more persuaded by compelling new product information. In line with this argument, I examined whether the effect of non-semantic names may be sensitive to information quality. I expected that for more compelling crowdfunding campaigns, the effect of non-semantic names on backers' funding decisions would be greater than for less compelling campaigns. I explored this possibility by including the Non-semantic name \times Staff pick interaction in the main model, because the quality of the information about a new product is important for a campaign to obtain the "Staff pick" endorsement.⁵

Focusing on campaigns that reached their funding goal, and consistent with the results reported previously, I found a positive, statistically significant simple effect of non-semantic (vs. semantic) new product names on *Funds collected* ($\beta = .133$, $t(4,447) = 4.22$, $p = .001$; see Table 3, Model 5).⁶ More importantly, in line with expectations, I found a positive and statistically significant *Non-semantic name* \times *Staff pick* interaction ($\beta = .125$, $t(4,447) = 2.85$, $p = .012$). I examined this interaction through a series of pairwise contrast analyses, which showed that among campaigns endorsed by Kickstarter, those with non-semantic names collected 25.8% (or an additional USD 30,327) more funding than those with semantic names (see Figure A3 in the Appendix). This effect was twice as large as the effect of non-semantic names for campaigns not endorsed by Kickstarter: Among campaigns not endorsed by Kickstarter, those with non-semantic names collected only 13.3% (or an additional USD 15,634) more funding than those with semantic names. Taken together, these results showed that non-semantic names positively impacted backers' funding decisions, but this effect was statistically significantly larger for new products that provided more compelling information on Kickstarter.

Discussion

The results of Study 1 provided support for H_{1a} using data on Kickstarter campaigns for 6,487 new products from 22 countries. I found a sizeable, positive economic effect of non-semantic new product names on funds collected, even after controlling for the design, popularity, and quality of the crowdfunding campaigns. This result was robust to alternative

⁵ See <https://www.kickstarter.com/blog/how-to-get-featured-on-kickstarter>. To obtain the "Staff pick" endorsement, Kickstarter advises product developers to introduce the idea behind the new product clearly and simply, use compelling, high-quality visual materials, present the information in order of importance, and provide concrete examples.

⁶ Observations for crowdfunding campaigns that were endorsed by Kickstarter and did not reach their funding goal were very few (23 cases). Because I had insufficient *Staff pick* observations for these campaigns, I focused our analysis on campaigns that reached their funding goals.

variable operationalizations, estimation approaches, and sampling decisions. In addition, Study 1 showed that the effect of non-semantic names can be sensitive to the quality of information about a new product, as this effect was substantively larger for the campaigns that likely used more compelling information. This finding is consistent with the idea that non-semantic new product names can make backers pledge more funding because they become curious, and thus, more persuaded when the information about the new product is more compelling.

Studies 2a and 2b: A Mechanism Underlying the Effect of Non-Semantic Names

In Studies 2a and 2b, I tested a mechanism I hypothesized underlies the effect of non-semantic (vs. semantic) new product names on backers' funding decisions (H_{1b}). Study 2a was a survey, in which I directly assessed whether non-semantic new product names could stimulate backers' curiosity more strongly than semantic names. Study 2b was a controlled experiment, in which I manipulated new product names and tested the full conceptual model in a single study.

Study 2a: Stimuli and Pretest

For Study 2a, I created a section of a webpage, which featured four crowdfunding campaigns and replicated the design of the "recommended" section on Kickstarter (see Figure A4 in the Appendix). To minimize the influence of any variable other than the new product name, I described all four campaigns in the exact same way: "a breakthrough alarm clock." I also informed respondents that these campaigns had just been posted online and were endorsed by the crowdfunding platform. Thus, all four campaigns were identical with the exception of the name of the new product. This allowed to attribute the results confidently to effects of the names rather than other possible differences among the campaigns. I randomized the order in which the new product names were displayed to avoid potential context effects (for a discussion, see Podsakoff et al. 2003).

I carefully selected the names, based on the results of a separate pilot study. In this pilot study, I asked 103 respondents ($\bar{x}_{Age} = 34$; 65% female) from the same population as the population of Study 2a to evaluate two names. One half of the respondents evaluated two non-semantic names (Nebia and Orbi) and the other half evaluated two semantic names (Chance and Sovereign). Respondents were shown no information other than the names, which were presented in random order. For each name, I measured respondents' attitude toward the name

(“This name is good;” “I like this name;” “This name is positive;” averaged in the index of attitude, $\alpha = .87$; Chen et al. 2017), name fluency (“This name is clear”), and whether the name was semantic or non-semantic (“This name is meaningful”). The items were presented in random order and measured on a 7-point Likert scale (1 = strongly disagree, 7 = strongly agree). A series of independent-samples t-tests confirmed that the semantic and non-semantic names were equally liked and fluent (all $ps > .13$). As expected, however, the non-semantic names (Nebia and Orbi) were perceived as evoking significantly less meaning than the semantic names (Chance and Sovereign; all $ps < .02$). Thus, the names that I used in Study 2a differed on the dimension of interest (being non-semantic vs. semantic), and the results that follow cannot be attributed to differences in name likability or fluency.

Study 2a: Method and Measures

Ninety-nine respondents ($\bar{x}_{\text{Age}} = 35$; 66% female) participated in this study. They first carefully reviewed the section of a reward-based crowdfunding webpage (see the left side of Figure A4 in the Appendix). Then, they were asked to indicate which of the crowdfunding campaigns they were most curious about. The main dependent measure was Curiosity; a binary variable that took a value of 1 if a respondent chose either one of the two campaigns with the non-semantic new product names, or a value of 0 if a respondent chose either one of the two campaigns with the semantic new product names.

Study 2a: Analysis, Results, and Discussion

I used a chi-square test to compare the proportion of respondents who indicated that they were most curious about a campaign with a non-semantic new product name against the proportion of respondents who indicated that they were most curious about a campaign with a semantic new product name. This test showed that respondents were more often curious about crowdfunding campaigns with the non-semantic new product names (61%) than about campaigns with the semantic new product names (39%; $\chi^2(1, N = 99) = 4.46, p = .035$), in support of H_{1b} .⁷ These results established that non-semantic new product names can make

⁷ To demonstrate that this result was not driven by some specific characteristics of the new product names chosen for this study, a replication study ($n = 105$; $\bar{x}_{\text{Age}} = 34$; 64% female) used a different, extended set of names (semantic: Iris, Pose, Sphere, Partner, Sovereign, and Chance; non-semantic: Nebia, Simo, Orbi, Nortic, Cilian, and Minox). Respondents indicated which campaigns they wanted to receive more information about. As in Study 2a, I found that respondents were significantly more curious and willing to receive more information

backers more curious and indicated that backers' curiosity may drive the effect of non-semantic new product names on backers' funding decisions. In Study 2b, I complemented these results by testing the entire conceptual model in a single study.

Study 2b: Stimuli

The aim of Study 2b was to provide causal evidence for a mechanism underlying the effect of non-semantic new product names on backers' funding decisions. Because the experimental method is particularly well-suited for establishing causal relationships among constructs (for a discussion, see Spencer et al. 2005), I employed this method in Study 2b.

In this experiment, I replicated as closely as possible the steps through which backers go when they invest on Kickstarter. Thus, the experimental stimuli and procedure maximized external validity, while enabling close experimental control to rule out alternative explanations. To this end, participants completed the experiment in two stages. In the first stage, they saw a brief preview of a reward-based crowdfunding campaign that pitched a reusable paper notebook (see Figure A5, Panel A in the Appendix). This description was based on an existing, successful Kickstarter campaign, and has been used as a stimulus in previous research (Li et al. 2017). The preview revealed the amount of money already pledged, the campaign progress thus far, and its deadline: USD 6,850 pledged, 50% funded, and 15 days, respectively. I adapted these numbers from published estimates of the average funding request (Kuppuswamy and Bayus 2017) and campaign duration on Kickstarter (Kickstarter 2021). Importantly, I created two versions of the preview, which were identical, except for the new product name. I relied on the names that I pilot-tested and used in Study 2a. About half of the participants saw the version of the preview for a campaign with a non-semantic new product name (i.e., Orbi), while the other participants saw a similar version of the preview, but for a campaign with a semantic new product name (i.e., Sovereign). I did this to manipulate the name of the new product, while keeping other variables that could influence participants' reactions constant.

Upon considering the campaign preview, participants proceeded to the second stage of the experiment. As on Kickstarter, participants were transferred to an individual page of the campaign, where they could carefully review information about the new product (see Figure A5, Panel B in the Appendix). The two versions of the individual campaign page were similar; only the new product name differed. Specifically, participants who saw the preview about the

about crowdfunding campaigns with the non-semantic new product names than about campaigns with the semantic new product names ($\chi^2(1, N = 105) = 5.04, p = .025$).

new product named “Orbi” continued to the individual page about “Orbi,” while participants who saw the preview about the new product named “Sovereign” continued to the individual page about “Sovereign.” This two-stage approach allowed to closely mimic the steps that backers follow organically when they make funding decisions on Kickstarter.

Study 2b: Method and Measures

I randomly assigned one hundred and forty-two participants ($\bar{x}_{\text{Age}} = 36$; 39% female) to one of the two between-participant experimental conditions (non-semantic vs. semantic new product name). I used the stimuli described previously: Depending on the condition, participants saw a brief preview and information about a new product with the non-semantic name “Orbi” or a brief preview and information about a new product with the semantic name “Sovereign.”

In designing the experimental procedure, I matched when measures were collected with the stages of the decision-making process backers typically follow when they invest on crowdfunding platforms. Specifically, on many reward-based crowdfunding platforms (e.g., Kickstarter, IndieGoGo, GoFundMe), backers first see brief campaign previews that prominently display new products’ names, while giving very little substantive information about the new products. It is at this point that backers may experience curiosity about a new product (this corresponds to the first stage in the experiment). If backers decide to learn more about that product’s campaign, they proceed to the product’s individual page (this corresponds to the second stage in the experiment). At this point, backers’ curiosity may translate into becoming more persuaded by the compelling information about the new product and thus, more willingness to invest in it. This setup mirrors perfectly the conceptual model (Figure 1) and establishes temporal precedence between the constructs in the model, which adds additional confidence that non-semantic new product names can have a causal effect on backers’ funding decisions through increased backers’ curiosity and greater campaign persuasiveness (for a discussion, see Podsakoff et al. 2003).

Consistent with this setup, I collected the measures at two points in time during the experiment. In the first stage, after participants had carefully considered the preview of the campaign, I asked them to complete a four-item measure of curiosity, adapted from previous research (Menon and Soman 2002). I averaged participants’ responses into an index of *Curiosity* ($\alpha = .92$). Then, participants proceeded to the second stage of the experiment and reviewed the full information about the new product. At this point, I measured how persuaded

participants were by the campaign information, using three items (Frey and Eagley 1993), which I averaged into an index of *Persuasion* ($\alpha = .82$). Last, participants reported their willingness to invest in the development of this new product using three items (Mahmood et al. 2019), which I averaged into an index of *Willingness to invest* ($\alpha = .97$). All items were measured on 7-point scales and are available in Table A3 in the Appendix. For each measure, I randomized the order of presentation of the items to reduce potential biases from context effects (for a discussion, see Podsakoff et al. 2003). No effect of measurement order was found.

Study 2b: Analysis, Results, and Discussion

I conducted a serial mediation analysis with *New product name* (1 = non-semantic, 0 = semantic name) as the independent variable, *Curiosity* as the first mediator, *Persuasion* as the second mediator, and *Willingness to invest* as the dependent variable. I used the PROCESS method (Model 6; 5,000 resamples; Hayes 2017)—a regression-based path analysis method often employed by crowdfunding studies (Johnson et al. 2018; Mahmood et al. 2019; Rose et al. 2020).

In support of H_{1a}-H_{1b}, this mediation analysis revealed that *New product name* was positively and significantly associated with increased *Curiosity* ($\beta = .612$, $t(140) = 2.02$; $p = .045$), which, in turn, was positively and significantly associated with *Persuasion* ($\beta = .610$, $t(139) = 8.87$; $p < .001$), which, in turn, was positively and significantly associated with *Willingness to invest* ($\beta = .960$, $t(138) = 8.12$; $p < .001$; see Figure 2). The confidence interval of the indirect effect of *New product name* on *Willingness to invest* through *Curiosity* and in turn, through *Persuasion*, excluded 0 (95% CI [.02; .72]), indicating significant serial mediation. After *Curiosity* and *Persuasion* were controlled for, the direct effect of *New product name* on *Willingness to invest* was not statistically significant ($\beta = -.17$, $t(138) = -.72$; $p = .47$), indicating full mediation.

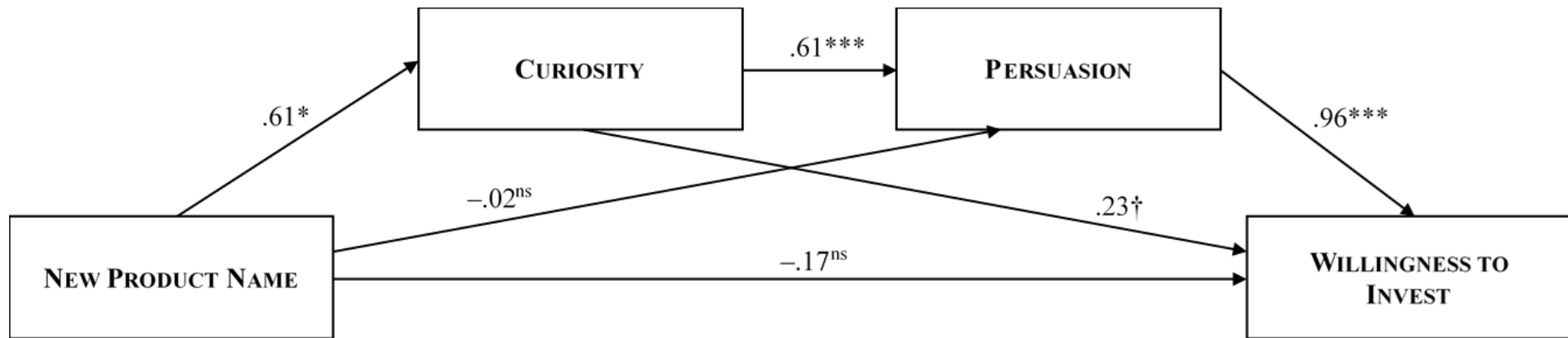


Figure 1.2. Study 2b: Indirect Effect of Non-Semantic New Product Name in a Serial Mediation

Notes. $n = 142$. 95% CI for the indirect effect of *New product name* (1 = Non-semantic name, 0 = Semantic name) on *Willingness to invest*: [.017; .719].

$^\dagger p < .10$; $* p < .05$; $** p < .01$; $*** p < .001$.

Overall, the results of Study 2b provided causal evidence that supported H_{1a}–H_{1b}. I found that non-semantic (vs. semantic) new product names can stimulate backers' curiosity, making backers more persuaded by the compelling information about a new product and thus, more willing to invest in its development. With the results of Study 2a, the results of Study 2b supported the theoretical claim that backers' curiosity can drive the positive effect of non-semantic new product names on backers' funding decisions.

General Discussion

Theoretical Contributions and Practical Implications

A central contribution of this research is to offer a curiosity-based framework for understanding the influence of new product names on backers' decision-making process when funding new product development on reward-based crowdfunding platforms. I theorized and empirically showed that non-semantic (vs. semantic) new product names have greater potential to stimulate backers' curiosity, and that curious backers are more likely to be persuaded by the compelling information about a new product and thus, pledge more funding.

These findings complement the literature on the effects of new product names. Much research in marketing (Hillenbrand et al. 2013; Keller 1993, 2003; Keller et al. 1998; Kohli et al. 2005; Klink 2001; Robertson 1989) has suggested that a name should be meaningful. However, there has been little evidence that this recommendation can be extended to the new product development and crowdfunding context. Prior research has shown that new products differ in important ways from established products, and as such, some of the traditional marketing guidelines may not always apply to new product development (Brexendorf et al. 2015; Klink and Athaide 2010). This work is aligned with this research and shows that the typical marketing recommendation in favor of semantic names can be disadvantageous in the context of new product development. More specifically, the findings demonstrate that, compared to semantic, non-semantic names—those that do not evoke a specific meaning—can be more beneficial for new products seeking funding on crowdfunding platforms. This difference likely occurs because backers' curiosity can play a particularly important role in this context. Therefore, this work helps integrate findings from previous related research that has observed that in several situations, such as for the names of new ventures (Chan et al. 2018) or when consumers are highly innovative (Klink and Athaide 2010) or have unconventional tastes (Baskin and Liu 2021), names that do not evoke a specific meaning can be beneficial. The

conceptual framework highlights the important role that curiosity may play in such contexts and specifically emphasizes the crowdfunding context—an increasingly important means for product developers to seek funding (Dai and Zheng 2019; Fleming and Sorenson 2016; Zhang and Chen 2019). As such, the findings also contribute to the literature on new product development and crowdfunding by showing that curiosity can be an important driver of backers' funding decisions and by highlighting a cognitive process that may drive investment decisions on reward-based crowdfunding platforms. These are novel insights, because previous studies primarily focused on the effects of product developers' curiosity (Gino 2018; Raine and Pandya 2019), and thus, relatively little is known about how curiosity experienced by backers can affect new product outcomes.

The results also add to the emerging stream of literature on intuitive, heuristics-based processes of backers' decision-making (Allison et al. 2017; Anglin et al. 2018; Chan et al. 2018; Mahmood et al. 2019; Rose et al. 2020). The results demonstrate that new product names, although offering little indication of product quality, can exert important influence on backers' decision-making process and ultimately, their funding decisions. In addition, the study highlights the possible interaction between the two routes to persuasion in the context of reward-based crowdfunding. Previous research has shown that persuasion can follow a more elaborate, effortful cognitive process (i.e., a central route) or a less effortful, heuristic-based process (i.e., a peripheral route; Allison et al. 2017). The findings reveal that curiosity can bridge these two routes: A persuasion process that begins on the peripheral route (i.e., from observing a non-semantic new product name) can proceed to a more involved, elaborate central route (i.e., more thorough information processing) when backers experience curiosity.

In addition to establishing these novel insights, the findings show that one of the salient characteristics of a new product—its name—can stimulate backers' curiosity on reward-based crowdfunding platforms, thus elucidating an antecedent of backers' curiosity in this context. This finding also makes a notable contribution to the literature on curiosity. Prior works have looked at curiosity-stimulating effects of information flow (i.e., interruptions; Kupor and Tormala 2015), information withdrawal (i.e., holding off an answer to a riddle; Wang and Huang 2018), and information-context incongruence (i.e., an unexpected name of a color, such as Kermit green; Miller and Kahn 2005). The results add to the sources above, the curiosity-stimulating effect of information characteristics; specifically, whether information has meaning or not.

Along with these theoretical contributions, the findings offer practical insights that might help new product developers raise more funding on reward-based crowdfunding

platforms. The findings of Study 1 suggest that giving a non-semantic name to a new product can contribute an additional USD 15,949 to the funding collected by a crowdfunding campaign. Importantly, these effects might be greater for crowdfunding campaigns that invest efforts in providing more compelling, credible information about a new product. According to the estimations, new products with non-semantic names that provided more compelling information collected 25.8% more funding, while new products with non-semantic names that provided less compelling information collected only 13.3% more funding. Thus, new products can derive additional benefits from choosing non-semantic names while also offering compelling information to potential backers. Moreover, the results indicate that stimulating backers' curiosity can add to persuasion attempts of new product developers, as curiosity makes backers attend to the information more thoroughly. Thus, it might be helpful to nurture backers' curiosity before presenting information that product developers want to be processed carefully. Overall, the findings alert new product developers to the importance of curiosity-invoking cues in their communications and in particular, the importance of name choice for their products.

Last, this work examined backers' curiosity, and thus, the results have implications for backers of reward-based crowdfunding campaigns. Specifically, backers wishing to curb the influence of new product names on their decision-making might take note of the effects of curiosity on their decision-making process and learn to focus less on new product names. Backers might also be wary of other curiosity-invoking characteristics of crowdfunding campaigns that provide little indication of the quality of the new product, as the curiosity-based process I document may apply to these characteristics as well.

Limitations and Directions for Future Research

The limitations of this work open up several interesting research opportunities. First, this research focused on one characteristic of a crowdfunding campaign that has potential to stimulate backers' curiosity—the new product name. However, the conceptual framework accommodates other characteristics that can stimulate curiosity, as long as they may have not been encountered before, lack specific meaning, or feel peculiar. For example, unconventional visual elements, product packaging or campaign materials incorporating mystery advertising can stimulate backers' curiosity. Further research can seek to uncover crowdfunding campaigns' characteristics that add to backers' experience of curiosity in the reward-based crowdfunding context.

Second, the framework suggests that curiosity encourages backers to process information related to the object of their curiosity more thoroughly. Importantly, this mechanism can lead to favorable outcomes when the information about a new product is compelling and credible. Future research can provide additional insights into the moderating role of information quality by examining the influence of implausible, low-quality arguments or mixed arguments in the information about a new product. Future research can also examine what makes new product information more credible and compelling.

Finally, research has suggested that curiosity can also lead to negative outcomes, for example, when people seek potentially unpleasant information (Hsee and Ruan 2016). In the context of reward-based crowdfunding, such information can include, for example, facts about product developers that contradict backers' expectations. Research is needed to extend the current knowledge about when backers' curiosity can backfire on crowdfunding platforms.

CHAPTER II.

THE IMPACT OF MORTALITY SALIENCE ON BRAND PREFERENCE

Brands often operate in environments in which consumers experience mortality salience (MS). In fact, death is one of the top themes news outlets cover daily, and the level of coverage can increase by more than threefold after major deadly events (Factiva 2020). Moreover, consumers can experience potentially deadly events themselves (e.g., disease outbreaks like COVID-19, terrorist attacks like 9/11). Prior research suggests that such exposures can lead to the onset of MS (Greenberg, Solomon, and Pyszczynski 1997), which can substantively influence consumer behavior (Dunn, White, and Dahl 2020; Ferraro, Shiv, and Bettman 2005; Huang, Huang, and Jiang 2018). Yet, relatively little is known about how events that increase MS can impact brands. The current research adds to this literature by exploring how MS affects brands with different personalities and by testing a mechanism underlying this effect.

Prior research suggests that, when experiencing increased MS, people tend to maintain their existing states in many different areas: from holding on to their extant worldviews, to committing to stable personal relationships (Greenberg et al. 1997; Florian, Mikulincer, and Hirschberger 2002). Extending these insights, I propose that the onset of MS can drive consumers to shun away from change. Building on research on brand personality (Aaker 1997; Freling, Crosno, and Henard 2011; Labrecque and Milne 2012; Wentzel 2009), I argue that brands with an exciting, but not other, personality tend to be closely associated with the notion of change. As such, the onset of MS tends to negatively impact consumers' evaluation of exciting, but not other, brands.

I find converging support for the propositions across several studies, using different methodologies and a variety of MS operationalizations. Study 1 was a large-scale field study (involving 35,914 U.S. consumers and 2,644 brands) that examined how the terrorist attack of 9/11 impacted equity of brands with different personalities. Using a difference-in-differences approach, Study 1 found that the consumer-based brand equity of exciting, but not other, brands significantly decreased following 9/11. Study 2 replicated this detrimental effect of MS in an experimental setting. Studies 3 and 4 provided evidence for the underlying change-avoidance process. Study 3 manipulated MS using the COVID-19 context and provided evidence for the mediating role of avoidance of change. Study 4 further supported the process by showing that experimentally reducing the degree of association between an exciting brand and the notion of

change eliminated the negative effect of MS. As such, Study 4 also demonstrated how managers can overcome the detrimental effect of MS on the equity of exciting brands.

These findings add to the marketing literature and offer actionable managerial insights. First, I add to the marketing literature on the effects of MS (Dunn et al. 2020; Ferraro et al. 2005; Huang et al. 2018) by identifying a previously undocumented, detrimental effect of a mortality threat on brands. The theoretical framework highlights a trend of individuals to avoid change when under MS; the findings show that this trend manifests itself at the level of conceptual associations between a brand personality and the notion of change, and thus indicate that under MS consumers may avoid even the idea of change. Second, this research complements the literature on branding and brand personalities (Aaker 1997; Aaker, Fournier, and Brasel 2004; Freling et al. 2011) by demonstrating that a prevalent contextual variable—existential threat—can interact with brand personality to influence the equity of brands. This is an important finding because the vast majority of prior works examine how different brand personalities interact with brand characteristics (Brasel and Hagtvedt 2016; Labrecque and Milne 2012; Wentzel 2009) or consumer characteristics (Chun and Davies 2006; Malär et al. 2011; Swaminathan, Stilley, and Ahluwalia 2009). In contrast, this research examines how brand personalities respond to contextual interferences, such as MS-inducing events. Third, the results reveal a mechanism underlying the effect: the onset of MS drives consumers to avoid change, and because brands with an exciting (vs. other) personality are more closely associated with the notion of change, they tend to be evaluated less favorably when consumers experience increased MS. This underlying mechanism adds to the theories on the effects of MS and to the theories on the differences between brands with different personalities. Finally, this research offers important practical implications. I highlight the adverse effects of MS-increasing events on the equity of exciting (vs. other) brands. I also identify a means through which marketers can overcome the negative effect of MS (i.e., by reducing the association between exciting brands and the notion of change). I discuss the main contributions and implications of the findings in more detail in the General Discussion section.

Conceptual Background

Mortality Salience

Death-related information, particularly when it is perceived as self-relevant (Huang et al. 2018), evokes thoughts about one's own demise and makes one's mortality salient (MS).

Death is probably the worst kind of change from a person's current state (i.e., being alive), and thus MS can pose an existential threat that individuals are trying to cope with (Greenberg et al. 1990; Rosenblatt et al. 1989). Hence, MS has profound effects on many psychological constructs such as cognition patterns (Schimel et al. 1999), worldviews (Greenberg et al. 1990), and behaviors (Jonas et al. 2002; Yen and Lin 2012). Given that MS makes people aware of the possibility of their own death, that is, the worst kind of change that could happen to them, a pervasive theme underlying many of these effects is that individuals tend to avoid change when they experience increased MS. Table 2.1 summarizes the relevant empirical studies that have shown how MS increases individuals' tendency to avoid change and maintain their current states across multiple domains.

To illustrate, MS can drive people to be more supportive of ideologies that offer "a stable conception of the world" and less supportive of ideologies that "are more open to change" (Burke, Kosloff, and Landau 2013, p. 185). MS can also make people express stronger approval (vs. disapproval) of opinions that are consistent with (vs. deviate from) their present worldviews (Greenberg et al. 1997). Moreover, MS can increase people's willingness to maintain existing relationships with their partners (Florian et al. 2002). In marketing domains, MS can make consumers shun away from unfamiliar options (Huang and Wyer 2015) and the threat of COVID-19 can reduce consumers' preference for less-familiar products (Galoni, Carpenter, and Rao 2020). MS can also decrease consumers' evaluation of new, innovative products (Boeuf 2019).

Although prior literature provides important insights into the effects of MS on consumer behavior (Dunn et al. 2020; Ferraro et al. 2005; Huang et al. 2018), there have been relatively few studies on the relationship between MS and brands. For example, Maheswaran and Agrawal (2004) theorize that the relationship between MS and brand evaluations is moderated by a brand's country-of-origin. In addition, Mandel and Heine (1999) demonstrate that MS can increase consumers' preferences for products of higher-status brands (e.g., Lexus cars and Rolex watches) over those of lower-status brands (e.g., Chevrolet cars and Pringles chips). Finally, Rindfleisch, Burroughs, and Wong (2009) show that consumer characteristics such as materialism can make consumers more attached to their preferred brands when consumers experience increased MS. These works suggest that MS can impact brand evaluations. However, it is still unknown whether this influence may be contingent on brand personality, an important brand element that is conceptually distinct from what existing literature has focused on (Aaker 1997; Malär et al. 2012).

Table 2.1. MS and Avoidance of Change: Summary of relevant research

<i>MS Effects</i>	<i>Core findings</i>	<i>Representative empirical findings</i>	<i>Source</i>
Avoiding change in established cultural worldviews	Avoiding values that differ from those accepted in the individual's culture	Increase in intolerance to values different from one's own	Greenberg et al. (1992)
		Increase in out-group bias: Punishing and avoiding others with dissimilar views	Greenberg et al. (1990); Rosenblatt et al. (1989); Greenberg et al. (1994); McGregor et al. (1998)
		Avoiding changing the primary uses for objects that symbolize cultural values (i.e., using a flag as a sieve)	Greenberg et al. (1995)
Avoiding change in self-perceptions	Rejecting self-perceptions that deviate from familiar, accepted, predictable personality profiles	Perceiving a clear, coherent, and integral (as opposed to ambiguous, variable, and random) self-narrative to be more accurate representation of self	Landau et al. (2009)
		Perceiving a common, culturally accepted personality description as being more accurate description of self	Dechesne et al. (2003)
Avoiding change in social systems	Refraining from social change; justifying existing social status quo	Increase in justifying social systems and status quo	Landau et al. (2009); Landau et al. (2004)
		Supporting political leaders who uphold traditions and resist social change (e.g., conservative politicians)	Jost and Hunyady (2005)
Avoiding change in cognition patterns	Rejecting cognitions that differ from usual, familiar knowledge structures	Increase in stereotypical thinking	Schimmel et al. (1999)
		Seeking information that is consistent with prior beliefs and supports the decisions made previously	Jonas et al. (2003)
		Increased believe that others' share one's view	Pyszczynski et al. (1996)
Avoiding change in behaviors	Avoiding new behaviors and behaviors that are at odds with the common ways of acting	Refusing to consider new uses for established things; decrease in creativity; increase in nostalgia	Routledge et al. (2008); Routledge et al. (2011)
		Engaging in behaviors aligned with cultural prescriptions and norms	Jonas et al. (2002)
		Increase in escalation of commitment	Yen and Lin (2012)
Avoiding change in social relationships	Refraining from seeking new relationships; sticking to existing social groups and partners	Increased willingness to maintain relationships with existing partners	Mikulincer and Florian (2000)
		Avoiding romantic commitments with partners who are different from individual	Strachman and Schimmel (2006)
		Increased preference for individuals that comply with stereotypes	Hoyt et al. (2009)
Avoiding change in consumption	Avoiding new and innovative products, variety in consumption; sticking to "known" products and brands	Increased willingness to consume in line with traditionally valued, familiar, and culturally accepted ways: Increase in consumption, materialism, and purchasing of luxury	Arndt et al. (2004); Kasser and Sheldon (2000); Mandel and Heine (1999)
		Avoiding risk in consumption and products that are of foreign origin	Atalay (2007); Maheswaran and Agrawal (2004); Friese and Hoffman (2008)
		Avoiding variety in consumption	Huang and Wyer (2015)
		Avoiding new and innovative products and increased preference for vintage	Boeuf (2019); McCabe et al. (2016); Sarial-Abi et al. (2017)
		Lower preference for brand extensions - new additions to the brand line	Kesebir and Hong (2009)

As such, investigating the interaction between MS and brand personality is valuable because it can deepen the understanding beyond the factors that have been previously explored. Filling this gap in the literature, I investigate whether MS can negatively impact the equity of brands with personalities that are more closely associated with the notion of change.

Brand Personality

Brands can be categorized according to their personalities—sets of human-like characteristics associated with brands, including exciting, sincere, competent, sophisticated, and rugged personalities (Aaker 1997). Each brand personality encompasses unique traits, for example, brands with an exciting personality are “daring” and “up-to-date” (see Appendix B for a complete list of traits associated with each brand personality). These characteristics are stored in consumer memory as a part of a broader associative network that connects information about different brand elements (Keller 1993). When encountering or recalling a brand, this complex network of associations becomes accessible and informs consumers’ impressions of the brand. For example, when thinking about a brand with an exciting personality, consumers may recall brand-related traits (e.g., this brand is “up-to-date” and “irreverent”) and this association can trigger related associations with color (e.g., red, Labrecque and Milne 2012), advertising (e.g., dynamic visual brand elements, Brasel and Hagtvedt 2016), prior consumption experiences (e.g., special, “exciting” experiences, Maehle et al. 2011), and even conceptually congruent constructs, such as relationships (e.g., fling-like consumer-brand relationships, Aaker et al. 2004) or sensory expectations (e.g., unusual, unexpected sensations, Sundar and Noseworthy 2016). In other words, brand personality exists within a complex network of different associations in consumers’ minds and can activate concepts that are closely related to this personality.

Brand personality has important effects on marketing outcomes. Prior research has shown that it can impact consumers’ preferences for brands (Swaminathan et al. 2009), consumers’ attachments to a brand (Malär et al. 2011), consumers’ brand loyalty (Kressman et al. 2006), consumers’ reactions to brand transgressions (Aaker et al. 2004), brand equity (Sirianni et al. 2013) and brand financial valuation (Luffarelli, Stamatogiannakis, and Yang 2019). Most of the existing research on brand personality has focused on how marketer-controlled or consumer variables can influence consumer reactions to brands with different personalities. On the other hand, little is known about how exogenous market factors interact with brand personality to impact marketing outcomes (see Table 2.2).

Table 2.2. Summary of relevant research on brand personality

Source	Brand personality	Outcomes	Marketing mix moderators	Consumer moderators	Exogenous shock moderators	Representative empirical findings
Labrecque and Milne (2012)	Exciting, sincere, competent, sophisticated, rugged	Brand personality perceptions	Color (e.g., in logo design)	X	X	Red color is congruent with (and increases) perceptions of the exciting personality
Venable et al. (2005)	Integrity, nurturance, sophistication, and ruggedness		Type of organization: for-profit vs. nonprofit	X	X	Personality structure of brands of nonprofit organizations is different from those of for-profit brands
Wentzel (2009)	Exciting, sophisticated, rugged		Consumer-employee interaction	X	X	Employee behavior that is consistent with brand personality enhances perceptions of that brand personality
Johar et al. (2005)	Exciting, sophisticated		X	Chronically vs. nonchronically accessible trait in consumer mind	X	The process of updating inferences about a brand's personality differs for consumers for whom a brand trait is chronically (vs. nonchronically) available
Maehle et al. (2011)	Exciting, sincere, competent, sophisticated, rugged		Product category	X	X	Exciting brands are associated with special "exciting" occasions
Park and John (2010)	Competent, sophisticated	Consumers perceptions of self	X	Implicit theories of the self	X	Consumers who believe their personality is fixed perceive themselves as more sophisticated after using a sophisticated brand
Orth and Malkewitz (2008)	Exciting, sincere, competent, sophisticated, rugged	Evaluations of packaging	Product packaging	X	X	Exciting brands benefit from using contrasting packaging designs
Sung and Kim (2010)	Exciting, sincere, competent, sophisticated, rugged	Brand affect	X	X	X	Exciting brand personality increases brand affect
Aaker et al. (2004)	Exciting, sincere	Consumer-brand relationships	Brand transgression	X	X	Consumers associate exciting brands with fling-like relationships; after brand transgression, relationships with exciting brands are reinvigorated
Brasel and Hagtvedt (2016)	Exciting, sophisticated	Brand attitude / Brand evaluations	Animated visual brand elements	X	X	The exciting brand personality is more congruent with dynamic animation
Eisend and Stokburger-Sauer (2013)	Exciting, sincere, competent, sophisticated, rugged		Brand life cycle, type of good (product vs. service)	X	X	The impact of the exciting brand personality is larger for products than for services
Freling and Forbes (2005)	Exciting, sincere, competent, sophisticated, rugged		X	Familiarity, involvement	X	Products with a brand personality are evaluated more favorably than products without a personality
Ang and Lim (2006)	Exciting, sincere, competent, sophisticated		Type of good (utilitarian vs. symbolic), use of metaphors in advertising	X	X	Exciting brand personality is more congruent with symbolic goods
Lovett et al. (2013)	Exciting	Word-of-mouth	X	X	X	Exciting brands generate more word-of-mouth
Chun and Davies (2006)	Enterprise, agreeableness, competence, chic, ruthlessness	Customer satisfaction	X	Status: Consumer vs. Employee	X	Brand personality of enterprise (e.g., innovative, imaginative, up-to-date) is associated with higher levels of consumer satisfaction
Sundar and Noseworthy (2016)	Exciting, sincere	Purchase intention	Sensory perceptions of a product	X	X	Consumers associate exciting brands with inconsistent actions, and thus prefer when exciting brands provide unusual, disconfirming product sensations
Swaminathan et al. (2008)	Exciting, sincere	Brand preference	Public vs. private consumption setting	Consumer attachment style	X	Highly anxious and highly avoidant consumers are more attached to brands with an exciting personality
Gao et al. (2009)	Exciting, competent	Brand choice	X	Self-view confidence	X	When consumer's self-confidence is threatened, consumers choose brands with personalities that help restore confidence in a threatened aspect of self
Luffarelli et al. (2019)	Exciting, sincere, competent, sophisticated, rugged	Brand equity	Logo asymmetry	X	X	Exciting brand personality is more congruent with asymmetrical logos
Sirianni et al. (2013)	Sophisticated, rugged		Employee-brand alignment	Brand familiarity	X	Alignment between employee behavior and brand personality increases brand equity
This research	Exciting, sincere, competent, sophisticated, rugged		Brand communications	X	MS-increasing events	MS-increasing events (e.g., terrorist attacks, viral pandemics) decrease equity of exciting brands

This is an important omission, because brands operate in environments that are often influenced by major exogenous factors (Whitler, Besharat, and Kashmiri 2021), such as terrorist attacks (Ruvio, Somer, and Rindfleisch 2014) and deadly viruses like COVID-19 (Galoni et al. 2020). In this research, I seek to fill this gap by investigating how MS-increasing events can impact brands with different personalities, depending on whether a brand personality is associated with the notion of change.

Association Between Exciting Brands and The Notion of Change

Prior research has shown that consumers perceive differently the five brand personalities (exciting, sincere, sophisticated, competent, and rugged), which thus have independent effects on consumer evaluations of brands (Eisend and Stockburger-Sauer 2013). Among these differences in associations, I argue that brand personalities also differ in the extent to which they are associated with the notion of change. Specifically, prior research suggests that brand elements related to change, such as unpredictable (vs. predictable) brand actions (Sundar and Noseworthy 2016), varied (vs. repetitive) visual brand elements (Luffarelli et al. 2019), and fling-like (vs. steady) relationships (Aaker et al. 2004) are more congruent with the exciting brand personality than with other brand personalities. Because these brand elements are closely linked within a brand's associative network (Keller 1993), inferences about change can inform other associations within a brand's network, such as inferences about a brand's personality. As such, I propose that brands with an exciting personality can be associated with the notion of change to a greater degree than brands with other personalities.

I conducted a pilot study to confirm this proposition. Fifty-three U.S. consumers ($M_{\text{age}} = 33$ years; 45% women), recruited from a consumer panel, evaluated short brand descriptions containing traits of all five brand personalities. Participants were presented one brand description at a time (15 descriptions in total, corresponding to the traits that "most reliably, accurately, and comprehensively represent the five dimensions" of brand personality; see Aaker 1997, p. 351; see Appendix B for a complete list of traits). For each brand description, participants rated the extent to which they perceived the brand to be changing constantly (1 = "To a very small extent," and 7 = "To a very large extent"). I found that traits comprising the exciting brand personality were more closely associated with the notion of change (one-sample t-test against the mid-point of the scale; $t(52) = 12.52$, $p < .001$, Cohen's $d = 1.72$), unlike those comprising the sincere, competent, sophisticated, or rugged personalities (p 's $> .10$; see Appendix B). In addition, participants associated the exciting brand personality with

the notion of change significantly more than any other brand personality (exciting vs. sincere personality: $t(52) = 7.92, p < .001$, Cohen's $d = 1.09$; vs. competent personality: $t(52) = 6.75, p < .001$, Cohen's $d = .93$; vs. sophisticated personality: $t(52) = 6.22, p < .001$, Cohen's $d = .86$; vs. rugged personality: $t(52) = 6.97, p < .001$, Cohen's $d = .96$; see Appendix B). Altogether, based on the results of the pilot study and prior research findings, I argue that brands with the exciting (vs. other) personality tend to be more closely associated with the notion of change.

Summarizing the discussion above, I propose that because the onset of MS drives consumers to avoid change, and because brands with an exciting (vs. other) personality are more closely associated with the notion of change, exciting, but not other, brands tend to be evaluated less favorably when consumers experience MS. In the following sections, I report four studies that test the proposed effect and its underlying mechanism.

Study 1: Field Evidence for the Effect

The purpose of Study 1 was to test the detrimental effect of MS on the equity of exciting, but not other, brands in a real-world context. I examined a real-life, deadly event—the terrorist attack of 9/11—as an exogenous shock that temporarily increased MS for American consumers (Ferraro et al. 2005; Landau et al. 2004; Pyszczynski et al. 2006). I used a difference-in-differences approach to examine the change in consumer-based brand equity (CBBE) of brands with different personalities before and after 9/11.

Data

I obtained the dataset from a major brand consulting firm, Young and Rubicam. This Brand Asset Valuator (BAV) dataset is considered “the most comprehensive global database of consumers’ perceptions on brands” (Batra et al. 2017, p. 915), because the BAV comprises perceptions of tens of thousands of consumers on thousands of brands from numerous product and service categories. The BAV has been widely used in scholarly research (Batra et al. 2017; Datta, Ailawadi, and van Heerde 2017; Heitmann et al. 2020; Lovett, Peres, and Shachar 2013; Luffarelli et al. 2019; Mizik and Jacobson 2008, 2009). Prior works have demonstrated the validity and practical significance of the BAV data. For example, research has shown that the BAV measures can predict online and offline word-of-mouth (Lovett et al. 2013), stock returns

(Mizik and Jacobson 2008), sales (Datta et al. 2017), market share (Heitmann et al. 2020), and firm financial valuation (Mizik and Jacobson 2009).

For the US market, Young and Rubicam collects the BAV dataset on a quarterly basis. The BAV data for the main analysis covered six sequential calendar quarters, from 1st quarter of 2001 to 2nd quarter of 2002 (three brand-quarter observations in the time period preceding 9/11 and three brand-quarter observations in the time period following 9/11). Using these data, I constructed an unbalanced panel dataset,⁸ which tracked 2,644 unique brands across 27 product and service categories for a total of 12,443 brand-quarter observations (see Table 3 for sample description). Overall, the dataset was based on brand perceptions of 35,914 consumers over a six-quarter time period. This sample was representative of the U.S. population and included major brands (e.g., Google, MTV, Walmart, Six Flags) from a wide variety of product and service categories (e.g., tech, media, retail, entertainment).

Measures

In the BAV dataset, the Brand Asset score is a measure of consumer-based brand equity (CBBE, Mizik and Jacobson 2008). Following an established approach to reduce skewness (Shi et al. 2017), I used the natural logarithm of the Brand Asset score as the dependent variable in the analysis.

As in prior research (Luffarelli et al. 2019), I operationalized the independent variable *Exciting* as an average of consumers' responses on the items related to the exciting brand personality available in the BAV dataset ("daring," "trendy," "unique," "independent," and "up-to-date;" $\alpha = .67$; Aaker 1997). I also constructed variables capturing the other four brand personalities: *Sincere* (average of "friendly," "original," and "down-to-earth;" $\alpha = .76$); *Competent* (average of "reliable," "intelligent," and "leader;" $\alpha = .67$); *Sophisticated* (average of "upper-class," "glamorous," and "charming;" $\alpha = .68$); and *Rugged* (average of "rugged" and "tough;" $\alpha = .87$).

⁸ The dataset is unbalanced because data for some of the brands were not collected in all six quarters, and hence, some of the observations are missing. Table 2.3 lists the number of observations per quarter.

Table 2.3. Study 1: Sample Description

	2001 Q1		2001 Q2		2001 Q3		2001 Q4		2002 Q1		2002 Q2	
	<i>M</i>	<i>S.D.</i>	<i>M</i>	<i>S.D.</i>	<i>M</i>	<i>S.D.</i>	<i>M</i>	<i>S.D.</i>	<i>M</i>	<i>S.D.</i>	<i>M</i>	<i>S.D.</i>
Log(CBBE)	.46	1.69	.45	1.62	.55	1.51	.50	1.55	.51	1.49	.50	1.44
<i>CBBE</i>	4.51	7.24	4.05	6.04	4.17	6.27	4.23	7.03	4.14	7.15	3.9	6.71
<i>Exciting</i>	9.24	4.13	9.31	3.77	9.47	3.57	9.58	3.7	9.24	3.63	9.16	3.29
<i>Sincere</i>	16.48	7.93	16.56	7.8	16.9	7.63	17.1	7.7	16.63	7.59	15.99	7.17
<i>Competent</i>	14.99	7.08	14.36	6.61	14.77	6.55	14.99	6.98	14.7	6.68	14.5	6.38
<i>Sophisticated</i>	6.59	5.81	6.93	5.62	7.25	5.53	7.35	5.66	6.94	5.54	7.15	5.01
<i>Rugged</i>	8.13	8.87	8.67	8.73	8.88	8.6	9.26	8.89	8.29	8.34	8.68	7.91
Brand awareness	254.47	148.16	234.85	131.2	261.4	206.96	217.27	169.2	313.58	222.17	254.01	167.79
Brand usage	30.43	25.63	29.77	24.85	29.41	25.02	29.46	25.12	30.02	24.65	29.37	23.93
n observations	2,142		2,180		2,028		2,038		2,018		2,037	
n categories	27		27		27		27		27		27	
n consumers	6,043		5,579		6,043		4,976		7,255		6,018	

The independent variable *MS* was a dummy variable representing pre-shock quarters in which data were collected prior to 9/11 ($MS = 0$; assigned to the data collected in the 1st, 2nd, and 3rd quarters of 2001) versus the post-shock period of increased MS, in which data were collected after 9/11 occurred ($MS = 1$; assigned to the data collected in the 4th quarter of 2001, and 1st and 2nd quarters of 2002).

Finally, I included a set of control variables. First, I controlled for the effects of the other four brand personalities (*Sincere*, *Competent*, *Sophisticated*, and *Rugged*) to isolate the effects of the exciting brand personality from the effects of these other brand personalities. Second, as in prior research (Luffarelli et al. 2019), I controlled for brand awareness (number of respondents who were familiar with a brand), and brand usage and purchase behavior (total percentage of respondents who used or purchased a brand). Third, I controlled for whether brands had 6 quarters of non-missing data by including a dummy variable *Balanced* (“1” = no missing observations; and “0” = at least one missing observation). This is because brands that were not followed throughout all 6 quarters (i.e., those with missing data) may be different from those followed throughout all 6 quarters.⁹ Finally, I included product and service category fixed effects because a Hausman specification test for random versus fixed effects indicated that the latter was the preferred model (Hausman specification test, $\chi^2 = 212.06$, $p < .001$).

Method

I used a difference-in-differences method (DD), which is widely utilized in marketing research (e.g., Eggert, Steinhoff, and Witte 2019; Janakiraman, Lim, and Rishika 2018; Kumar et al. 2016; Landsman and Stremersch 2020; Shi et al. 2017). DD approximates a natural experiment by comparing the differences in the outcomes of a “treated” group and a “control” group before versus after the exogenous shock (“treatment”). This method thus helps establish causal effects of the shock on the outcomes of a treated group (Janakiraman et al. 2018; Shi et al. 2017).

Prior research has shown that 9/11 increased MS (Ferraro et al. 2005; Landau et al. 2004; Pyszczynski et al. 2006). Thus, I used this major deadly event as an exogenous, MS-increasing shock in the DD analysis (operationalized by the independent variable *MS*). It is important to note that 9/11 was exogenous to consumer perceptions of brands and CBBE,

⁹ I also conducted a robustness check, estimating our model on a balanced panel dataset (see Robustness checks sub-section).

because companies and consumers were unlikely to be able to anticipate 9/11. That is, firms were unlikely to adjust their advertising and branding strategies in anticipation of the event, and consumers, their brand preferences.

Following prior research (Acemoglu, Autor, and Lyle 2004; Bleakley 2010; Dabalén and Paul 2014; Davis and Weinstein 2002; Duflo 2001), I defined the treated and control groups in terms of intensity of the exciting brand personality (operationalized by the independent variable *Exciting*). This continuous measurement captured varying, instead of binary, levels of treatment intensity (i.e., more and less treated observations, rather than a treated and a control group). Importantly, 9/11 did not affect the average level of the exciting personality ($\beta = -.10$, $t(11711) = -1.50$, $p = .14$), and thus, pre- and post-9/11 differences in *Exciting* could not drive the results.

The causal effect of 9/11 on CBBE of exciting brands was estimated by the interaction of the independent variable *MS* that captured the effect of the MS-increasing event (i.e., before vs. after difference) and the independent variable *Exciting* that captured the effect of treatment intensity (i.e., higher vs. lower perceptions of the exciting brand personality). More formally, I estimated the following DD model:

$$(2.1) \quad \text{Log}(CBBE)_{it} = \beta_0 + \beta_1 \text{Exciting}_{it} + \beta_2 MS_t + \beta_3 \text{Exciting}_{it} \times MS_t + \delta X_{it} + \varepsilon_{it},$$

where $\text{Log}(CBBE)_{it}$ was the natural logarithm of CBBE of brand i in quarter t , Exciting_{it} was the rating of exciting brand personality of brand i in quarter t , MS_t was the dummy variable indicating quarters before ($MS = 0$) and following ($MS = 1$) the exogenous shock of 9/11, δX_{it} was a vector of control variables that I detailed previously and their corresponding coefficients, and ε_{it} was a random error term.

Test of Difference-in-Differences Assumption

The validity of the DD method rests on a parallel trends assumption that there should be no difference between outcome trends of a treated and a control group before the arrival of the shock (Eggert et al. 2019; Janakiraman et al. 2018). In my research context, the parallel trends assumption would be satisfied if the CBBE trends of brands rated as more exciting and of brands rated as less exciting did not differ in the period prior to 9/11.

I tested this assumption by regressing CBBE on a set of quarterly dummy variables, each interacted with *Exciting*. This allowed to examine the evolution of CBBE before and after 9/11 for different levels of *Exciting*. The 3rd quarter of 2001 (the quarter right before 9/11) was used as the base quarter for comparison. If the DD parallel trends assumption is satisfied, *Exciting* should not significantly interact with the dummies for quarters before 9/11 (i.e., $Exciting \times 2001Q1$ and $Exciting \times 2001Q2$). In other words, there should be no change in the trends of CBBE of more exciting and less exciting brands *prior* to the arrival of 9/11.

As shown in Table 2.4, there was no significant change in the difference in CBBE of the more exciting versus less exciting brands before 9/11. The difference in CBBE in the pre-shock quarters (1st and 2nd quarters of 2001) was not statistically different from the difference in CBBE in the base 3rd quarter of 2001 ($p = .98$ and $p = .40$, respectively).¹⁰ This pattern thus supported the parallel trends assumption and the validity of the DD method I used.¹¹

Results of the Difference-in-Differences Model

To test the proposed effect, I estimated the specified DD model (see Equation 2.1). Specifically, I regressed the natural logarithm of CBBE on *Exciting*, *MS*, and, most importantly, the $Exciting \times MS$ interaction, along with the control variables. A significant negative $Exciting \times MS$ interaction would provide support for a negative effect of 9/11 on CBBE of exciting brands.

As shown in Table 2.5, a negative and significant $Exciting \times MS$ interaction ($\beta = -.01$, $t(11699) = -2.81$, $p = .009$) was found. That is, the MS-increasing, exogenous shock of 9/11 had a significant negative impact on CBBE of more exciting, as compared to less exciting, brands. This thus supported my proposition.

I further dissected this detrimental effect in multiple ways. First, I explored the impact of 9/11 on the most exciting brands—those ranked in the 95th percentile on *Exciting* (such as MTV, Skechers, and Sony Playstation in my sample)—and the least exciting brands—those ranked in the 5th percentile on *Exciting* (such as Actimel, Novartis, and Corn Flakes in my sample).

¹⁰ Using the 1st quarter of 2001 or the 2nd quarter of 2001 as the base quarter for comparison yields similar results.

¹¹ Note that there was a significant decrease in CBBE of the more exciting as compared to less exciting brands in the 4th quarter of 2001—right after 9/11 ($\beta = -.01$, $t(11691) = -3.00$, $p = .006$). This pattern showed that more exciting brands experienced a larger decrease in CBBE following the MS-increasing event of 9/11 and is in line with the proposed effect.

Table 2.4. Study 1: Test of the Difference-in-Differences Assumption: Does CBBE of Exciting Brands Change Before the Shock of 9/11?

	DV: Log(CBBE)	
	β	SE
<i>Exciting</i>	.083***	.007
Exciting × 2001 Q1	.001	.005
Exciting × 2001 Q2	.003	.003
<i>Exciting</i> × 2001 Q4	-.010**	.003
<i>Exciting</i> × 2002 Q1	-.005	.004
<i>Exciting</i> × 2002 Q2	-.011*	.006
<i>Sincere</i>	.030***	.004
<i>Competent</i>	.095***	.008
<i>Sophisticated</i>	.030***	.005
<i>Rugged</i>	.014***	.004
Quarter fixed effects		Yes
Product and service category fixed effects		Yes
Control variables		Yes
Within-R ²	.817	
n observations	11,711	

Notes: The 3rd quarter of 2001 is taken as the base category. Fixed effects regression with robust standard errors clustered by product and service category.

The focal variables of interest that test the parallel trends assumption are highlighted in boldface. The parallel trends assumption is satisfied because CBBE did not change prior to 9/11 (i.e., *Exciting* interactions with pre-9/11 quarters 2001Q1 and 2001Q2 are not statistically different from *Exciting* interaction with pre-9/11 quarter 2001Q3).

*** $p < .001$, ** $p < .05$, * $p < .10$

Table 2.5. Study 1: Results of the Difference-in-Differences Model

	DV: Log(CBBE)	
	β	<i>SE</i>
<i>Exciting</i>	.084***	.007
<i>MS</i>	.099**	.040
<i>Exciting</i> × <i>MS</i>	-.010**	.004
<i>Sincere</i>	.030***	.004
<i>Competent</i>	.095***	.008
<i>Sophisticated</i>	.030***	.005
<i>Rugged</i>	.014***	.004
Brand awareness	.001***	.0001
Brand usage	.022***	.001
Balanced	.117**	.049
Product and service category fixed effects		Yes
Within-R ²	.817	
n observations	11,711	

Notes: DV = Dependent variable. Fixed effects regression with robust standard errors clustered by product and service category.

The focal variable of interest and its statistically significant coefficient estimate (i.e., DD estimate) are highlighted in boldface.

*** $p < .001$, ** $p < .05$

Using an experimental analogy, this analysis highlighted the difference between a group that received the maximum “treatment” and a group that received the minimal “treatment.” This analysis revealed that the most exciting brands experienced a substantial negative effect of MS, as their CBBE decreased by 22.97% ($\beta = -.23$, $z = -2.79$, $p = .005$). In contrast, the least exciting brands in my sample was not negatively impacted by 9/11. In fact, their CBBE increased ($\beta = .07$, $z = 2.27$, $p = .023$).

Second, I explored the impact of 9/11 on CBBE of exciting brands during calendar quarters in which MS was likely more potent: I investigated the effect of 9/11 on CBBE of exciting brands in the quarter right before 9/11 (2001Q3) versus the quarter right after 9/11 (2001Q4). As expected, this analysis revealed a negative and significant *Exciting* \times MS interaction ($\beta = -.01$, $t(3829) = -3.26$, $p = .003$). I further probed this interaction by conducting a spotlight analysis at one standard deviation above and below the mean level of *Exciting* ($M = 9.52$, $SD = 3.63$). Figure 2.1 visually presents this analysis. Supporting the proposition, CBBE of more exciting brands was substantially degraded by the MS-increasing event of 9/11 ($\beta = -.06$, $z = -3.90$, $p < .001$). In contrast, CBBE of less exciting brands was not affected by 9/11 ($\beta = .02$, $z = .75$, $p = .46$). Overall, the main results and the findings from the two additional analyses offer converging support for the proposed negative effect of MS on the equity of exciting brands.

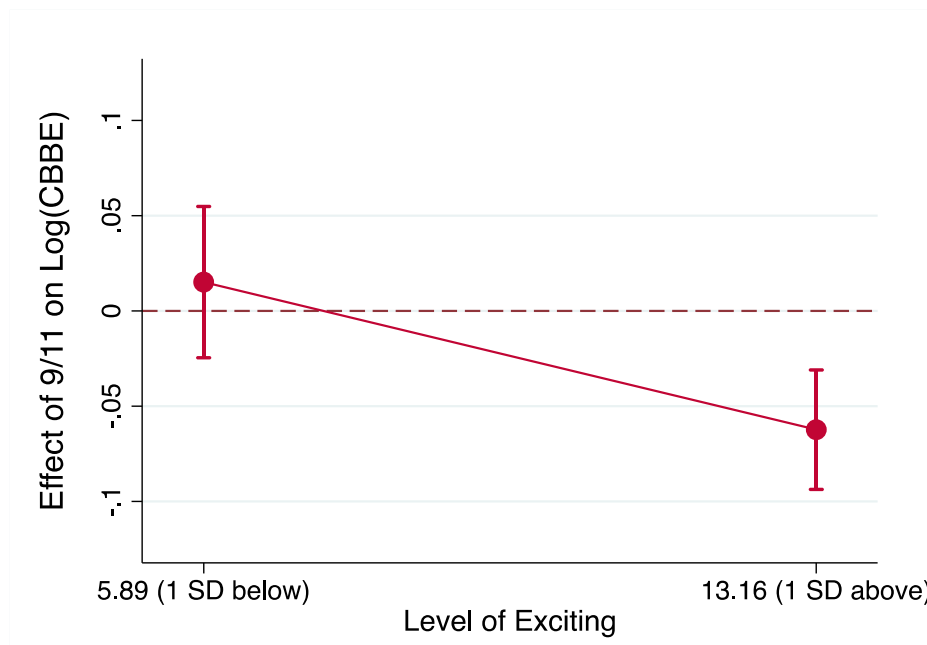


Figure 2.1. Study 1: Impact of 9/11 on CBBE Across Levels of Exciting Brand Personality

Is the Detrimental Effect of MS Unique to Exciting Brands?

I examined whether the MS-increasing event of 9/11 degraded equity of brands with an exciting, but not other, personality. I explored whether the parallel trends assumption held for the other four brand personalities. Specifically, I regressed CBBE on a set of quarterly dummy variables that were interacted with *Sincere*, *Competent*, *Sophisticated*, and *Rugged*. I also included in this model a set of quarterly dummy variables interacted with *Exciting* to test whether the main results were robust when interactions with the other four brand personalities were taken into account. Table 2.6 summarizes the results of this analysis.

First, the results of the main model for the exciting personality were replicated. There was no change in the difference of CBBE of the more exciting as compared to less exciting brands before 9/11 (the pre-9/11 1st and 2nd quarters of 2001 were not statistically different from the base 3rd quarter of 2001, $p = .71$ and $p = .81$, respectively).¹² Furthermore, in line with the proposed effect, there was a significant decrease in CBBE of the more exciting brands as compared to less exciting brands in the 4th quarter of 2001—right after 9/11 ($\beta = -.01$, $t(11671) = -2.17$, $p = .04$).

Second, results indicated that only two of the other four personalities satisfied the parallel trends assumption and, thus, could be meaningfully examined within the DD framework. Specifically, there was no change in either the difference in CBBE of the more sincere as compared to less sincere, or more sophisticated as compared to less sophisticated brands before 9/11. The pre-shock 1st and 2nd quarters of 2001 were not statistically different from the base 3rd quarter of 2001 for brands with the sincere personality ($p = .48$ and $p = .34$, respectively) and for brands with the sophisticated personality ($p = .99$ and $p = .92$, respectively). However, and importantly, there was also no significant effect of the exogenous shock on CBBE of these two personalities: CBBE of the sincere and sophisticated brands right after 9/11 (i.e., the 4th quarter of 2001) was similar to CBBE observed in the quarter before 9/11 (i.e., the base 3rd quarter of 2001; $p = .72$ and $p = .70$, respectively, for the sincere and sophisticated personality). Thus, I found no evidence that the MS-increasing, exogenous event of 9/11 had an effect on CBBE of sincere and sophisticated brands.

¹² For all comparisons in this section, using the 1st quarter of 2001 or the 2nd quarter of 2001 as the base quarter for comparison yields similar results.

Table 2.6. Study 1: The Effect is Observed only for Exciting, but not Other, Brands

	DV: Log(CBBE)	
	β	SE
<i>Exciting</i>	.082***	.007
Exciting × 2001 Q1	-.001	.004
Exciting × 2001 Q2	.001	.004
<i>Exciting × 2001 Q4</i>	-.008*	.004
<i>Exciting × 2002 Q1</i>	.001	.004
<i>Exciting × 2002 Q2</i>	-.008	.006
<i>Sincere</i>	.030***	.005
Sincere × 2001 Q1	.002	.003
Sincere × 2001 Q2	-.003	.003
<i>Sincere × 2001 Q4</i>	.001	.002
<i>Sincere × 2002 Q1</i>	-.001	.002
<i>Sincere × 2002 Q2</i>	-.002	.003
<i>Competent</i>	.093***	.007
Competent × 2001 Q1	.005	.005
Competent × 2001 Q2	.013**	.004
<i>Competent × 2001 Q4</i>	-.004	.004
<i>Competent × 2002 Q1</i>	-.001	.003
<i>Competent × 2002 Q2</i>	-.002	.004
<i>Sophisticated</i>	.031***	.004
Sophisticated × 2001 Q1	-.001	.003
Sophisticated × 2001 Q2	.001	.002
<i>Sophisticated × 2001 Q4</i>	-.001	.002
<i>Sophisticated × 2002 Q1</i>	-.009**	.003
<i>Sophisticated × 2002 Q2</i>	-.001	.004
<i>Rugged</i>	.018***	.004
Rugged × 2001 Q1	-.004*	.002
Rugged × 2001 Q2	-.005**	.002
<i>Rugged × 2001 Q4</i>	-.003	.002
<i>Rugged × 2002 Q1</i>	-.007***	.001
<i>Rugged × 2002 Q2</i>	-.005**	.002
Quarter fixed effects		Yes
Product and service category fixed effects		Yes
Control variables		Yes
Within-R ²	.819	
n observations	11,711	

Notes: The 3rd quarter of 2001 is taken as the base category. Fixed effects regression with robust standard errors clustered by product and service category.

The focal variables of interest that test the parallel trends assumption are highlighted in boldface. The parallel trends assumption is satisfied for *Exciting*, *Sincere*, and *Sophisticated* because CBBE did not change prior to 9/11 (i.e., *Exciting*, *Sincere*, and *Sophisticated* interactions with pre-9/11 quarters 2001Q1 and 2001Q2 are not statistically different from interactions with pre-9/11 quarter 2001Q3). The parallel trends assumption is violated for *Competent* and *Rugged* because CBBE changed prior to 9/11 (i.e., for *Competent*, CBBE in 2001Q2 was statistically different from CBBE in 2001Q3; for *Rugged*, CBBE in 2001Q1 and 2001Q2 were statistically different from CBBE in 2001Q3).

*** $p < .001$, ** $p < .05$, * $p < .10$

Similarly, I found no evidence that 9/11 had an effect on CBBE of competent and rugged brands. First, the parallel trends assumption did not hold for these brand personalities. Specifically, I found a significant change in difference between CBBE of brands with more competent as compared to CBBE of brands with less competent personality before 9/11 (*Competent* × 2001Q2 interaction: $\beta = .013$, $t(11671) = 3.14$, $p = .004$). Similarly, there was a significant change in difference in CBBE of brands with more rugged as compared to CBBE of brands with less rugged personality before 9/11 (*Rugged* × 2001Q1 interaction: $\beta = -.004$, $t(11671) = -2.01$, $p = .055$; *Rugged* × 2001Q2 interaction: $\beta = -.005$, $t(11671) = -2.45$, $p = .021$). A violation of the parallel trends assumption meant that the change in CBBE could not be confidently attributed to the effect of the shock: this change could have been driven by other processes that were impacting fluctuations in CBBE of competent and rugged brands prior to 9/11. Second, even if parallel trends are not assumed, there was no change in CBBE of more competent (versus less competent) and more rugged (versus less rugged) brands following 9/11 (*Competent* × 2001Q4 interaction: $p = .32$; and *Rugged* × 2001Q4 interaction, $p = .13$). Thus, these findings suggested that the proposed detrimental effect of MS was specific to brands with an exciting, but not other, personality.

Robustness Checks

I performed several checks to ascertain that the main results were robust. First, I re-estimated the DD model on the balanced dataset by excluding all brands for which I did not have full information over 6 quarters. The results were similar to the findings of the main model (see Table B1 in Appendix B for details).

Second, I explored whether the results were robust with respect to potential outliers. It might be that CBBE of some observations could substantively deviate from the mean levels in my dataset, biasing the overall pattern of results. To investigate this possibility, I winsorized the dependent variable at the 1st and 99th percentiles. The results replicated the findings of the main model (see Table B2 in Appendix B for details).

Third, it might be that brands with abnormal exciting personality levels drove the results. I investigated this by repeating the main analysis with the independent variable *Exciting* winsorized at the 1st and 99th percentiles. The results of this analysis were consistent with the findings of the main model (see Table B2 in Appendix B for details).

Fourth, to validate the identification of 9/11 as the exogenous shock that triggered the detrimental effect of MS, I conducted a “fake” event regression test (Eggert et al. 2019; Janakiraman et al. 2018). For this test, I specified a “fake” event, which “happened” a year after 9/11, as a cutoff separating the pre- and post-shock time periods. I compared CBBE of exciting brands in the “fake” pre-shock period (1st, 2nd, and 3rd quarters of 2002) and the “fake” post-shock period (4th quarter of 2002, and 1st and 2nd quarters of 2003).¹³ Because in 2002, one year after 9/11, no deadly events of a comparable scale occurred in the US, American consumers should not have experienced increased MS to the same degree. I repeated the main analysis using this specification. As expected, I did not find evidence for the negative effect of the shock in this regression test (see Table B3 in Appendix B for details). This analysis therefore provided additional evidence that the pattern of the results cannot be simply attributed to factors such as seasonality.

Overall, the findings of Study 1 provided evidence for the proposed detrimental effect of MS on brands with an exciting, but not other, personality and highlighted this impact on real-world brands across a wide spectrum of product and service categories. Nevertheless, Study 1 has several limitations. First, there is a possibility that increased MS after 9/11 encouraged consumers to seek more friendly, family-oriented experiences and thus, the results reflect an increase in equity of the sincere brands rather than decrease in equity of the exciting brands. However, this possibility seems implausible because the model examines independent effects of each brand personality separately rather than in relation to one another. Moreover, the additional analyses indicate that, looking at the sincere brand personality, there was no statistically significant difference in consumer perceptions of the intensity of sincere brand personality before and after 9/11 ($p = .77$) nor in CBBE of sincere brands following 9/11 ($p = .72$). The same, non-significant pattern of results hold for CBBE of other brand personalities, except for the exciting brands. Thus, it appears unlikely that the results are driven by changes in sincere brand personality specifically or any other brand personality. Second, although prior research has confirmed that reminding consumers of 9/11 increases MS (Ferraro et al. 2005; Landau et al. 2004; Pyszczynski et al. 2006), there is a possibility that MS could have been one of several forces impacting consumer behavior in the time period when 9/11 happened. To address this possibility, I conducted Study 2, in which I directly manipulated MS in a controlled experimental setting.

¹³ For this analysis, I used BAV datasets collected in the 2nd, 3rd and 4th quarters of 2002, and the 1st and 2nd quarters of 2003.

Study 2: Experimental Evidence for the Effect

Whereas Study 1 established the detrimental effect of MS on the equity of exciting (vs. other) brands in the field, Study 2 sought to provide causal evidence for the proposed effect in the controlled laboratory setting with high internal validity. Moreover, Study 2 used another operationalization of the exciting personality by drawing on a different set of the exciting brands' traits (Aaker 1997). This approach allowed to establish that the effect is not driven by the specific brand personality traits available in the BAV dataset used in Study 1.

Design and Procedure

Three hundred and forty-four U.S. consumers ($M_{\text{age}} = 37$ years;¹⁴ 55% women) recruited from a consumer panel were randomly assigned according to a 2 (MS vs. control) \times 2 (exciting vs. sincere brand personality) between-participant design.

Participants first completed an established MS manipulation (Florian et al. 2002). Those in the MS (vs. control) condition were asked to write down their thoughts about their own death (vs. watching television). Following prior research (Greenberg et al. 1997; Ferraro et al. 2005; Huang et al. 2018), participants completed a filler task before responding to the dependent measures: participants completed the PANAS measures (Watson, Clark, and Tellegen 1988) and an arousal measure (Russell, Weiss, and Mendelsohn 1989). From these filler measures, only the negative component of PANAS differed across conditions. However, including the measures of negative affect, positive affect, and arousal (both individually and together) into the analyses reported below did not change the pattern of results (see Appendix B for details).

As an ostensibly unrelated third task, participants read a short description of an apparel brand. Following prior research (Aaker et al. 2004; Luffarelli et al. 2019), the description was manipulated to project either an exciting or sincere brand personality. Specifically, the exciting (vs. sincere) version of the description characterized the brand as “cool,” “daring,” and “unique” (vs. “small-town,” “sentimental,” and “honest;” Aaker 1997; see Appendix B). A pretest with participants from the same population as the main study confirmed that the two versions of the description differed as expected in terms of brand personality, but they did not differ in other dimensions such as likability or quality (see Appendix B). As a dependent

¹⁴ Research has shown that a person's age may moderate the effects of MS (Chopik 2017). In this, and all other experimental studies, participants' age did not significantly impact our results (see Appendix B for details).

measure, participants rated the apparel brand on three scale items (1 = “Very unfavorable/negative/bad,” and 7 = “Very favorable/positive/good”). I averaged these items into a single brand evaluation measure for analyses ($\alpha = .94$). Finally, participants responded to the basic demographic measures and an attention check (Pennycook, Cannon and Rand 2018). The responses of twenty-nine participants who failed the attention check were removed from subsequent analyses. (Including these responses in the analysis yielded a similar pattern of results.)

Results

A 2×2 ANOVA on brand evaluation with the MS condition (MS vs. control) and brand personality (exciting vs. sincere) as between-participant factors revealed a significant main effect of brand personality ($F(1, 311) = 9.70, p = .002, \eta_p^2 = .03$). Compared to those in the sincere brand personality condition ($M_{\text{Sincere}} = 5.06, SD_{\text{Sincere}} = 1.27$), participants in the exciting personality condition evaluated the brand less favorably ($M_{\text{Exciting}} = 4.58, SD_{\text{Exciting}} = 1.32$). The main effect of MS was not significant ($p = .43$). Importantly, the two-way interaction was significant ($F(1, 311) = 8.00, p = .005, \eta_p^2 = .03$; see Figure 2.2). Consistent with the proposed effect, participants in the MS condition evaluated the exciting brand significantly less favorably ($M_{\text{MS_Exciting}} = 4.35, SD_{\text{MS_Exciting}} = 1.31$) than those in the control condition ($M_{\text{Control_Exciting}} = 4.88, SD_{\text{Control_Exciting}} = 1.29$; $F(1, 311) = 6.66, p = .01, \eta_p^2 = .02$). In contrast, MS did not significantly alter participants’ evaluations of the sincere brand ($M_{\text{Control_Sincere}} = 4.92, SD_{\text{Control_Sincere}} = 1.25$ vs. $M_{\text{MS_Sincere}} = 5.22, SD_{\text{MS_Sincere}} = 1.29$; $p > .16$). Furthermore, in the MS conditions, participants’ evaluations of the exciting brand were significantly less favorable than those of the sincere brand ($F(1, 311) = 18.61, p < .001, \eta_p^2 = .06$). In the control conditions, however, this pattern was not found ($p > .84$).

Overall, the findings of Study 2 provided experimental support for the detrimental effect of MS in a controlled experimental setting, further demonstrating that MS can decrease the equity of brands with the exciting, but not other, personality.

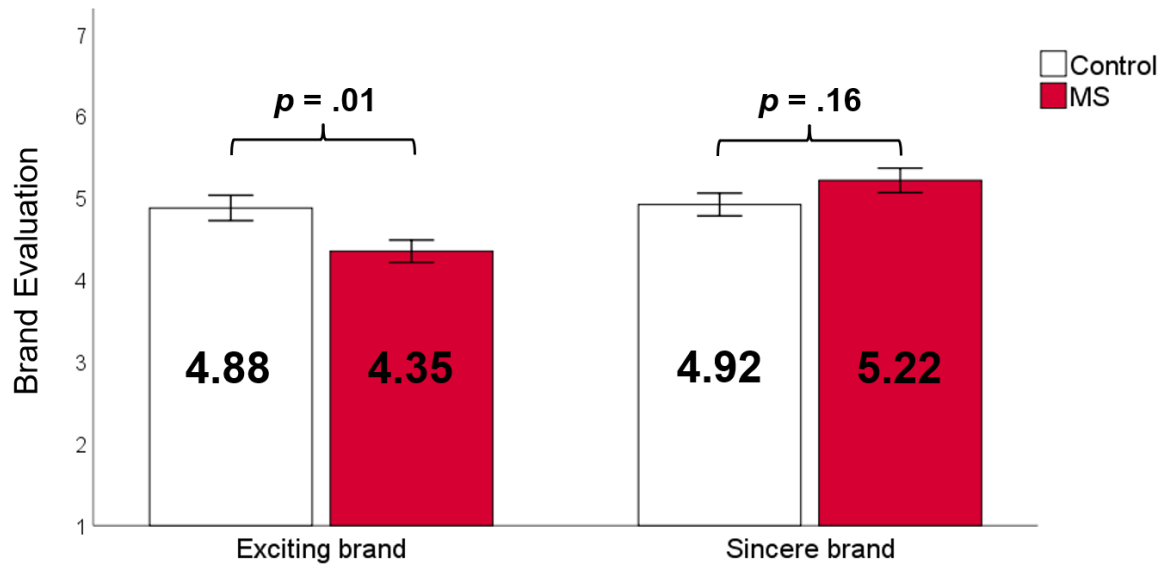


Figure 2.2. Study 2: MS Decreased Evaluation of the Exciting (But Not Sincere) Brand

Study 3: A Mechanism Underlying the Effect

Study 3 aimed to test whether avoidance of change underlies the proposed detrimental effect of MS on the equity of exciting (vs. other) brands. To further demonstrate robustness, Study 3 used a different context for MS induction: making the fatal impact of COVID-19 outbreak salient. In addition, I also used a different approach to induce MS by manipulating the order in which participants completed experimental tasks. This approach ensured that the effect is not driven by the specific control condition or the manipulation procedure most commonly used in the MS literature (e.g., Florian et al. 2002).

Design and Procedure

Ninety-one graduate students ($M_{\text{age}} = 23$ years; 50% women) from a major European university participated in this lab study in exchange for course credit. The study was conducted during the last week of February 2020, when the COVID-19 outbreak was widely recognized as a deadly threat, but the virus was not yet widespread in the area.

Participants were randomly assigned to one of the two conditions (MS vs. control) in a between-participant design. I manipulated MS by changing the order in which participants completed experimental tasks. Participants in the MS condition started the study with a “current event” task. They were asked to write about how the coronavirus could fatally impact them

(see Appendix B for details). As in Study 2, participants also completed a filler task: they responded to measures on stress (Durante and Laran 2016) and arousal (Russell et al. 1989). (Responses on these measures did not differ between the experimental conditions; including them into the analyses as covariates did not change any of the results reported below; see Appendix B.) Thereafter, participants proceeded to complete a measure of brand evaluation and mediation measures as a part of a third, ostensibly unrelated task. Participants in the control condition first completed the measure of brand evaluation and mediation measures, and then the “current event” task and the arousal and stress measures. In both conditions, participants also responded to basic demographics measures.

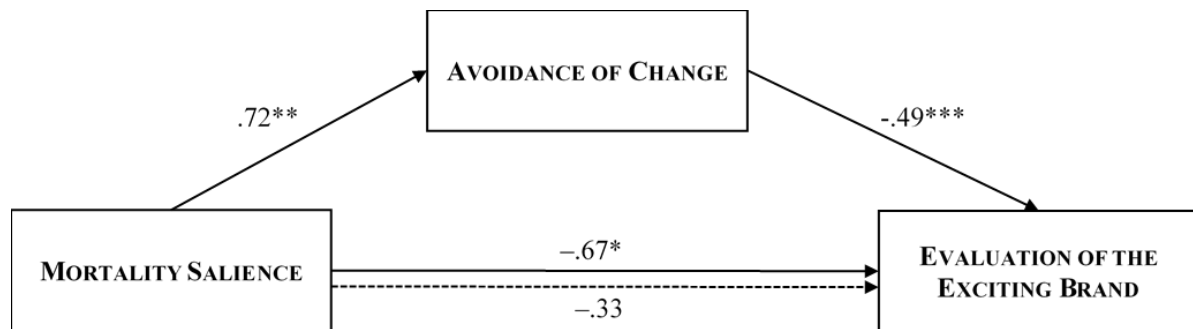
The description of the exciting brand was the same as that in Study 2. As a measure of brand evaluation, participants rated how much they liked the brand (1 = “Not at all,” 7 = “Quite a lot”). Participants also completed mediation measures pertaining to avoidance of change (“I like brands that offer something new every time” and “I prefer brands that are more dynamic than stable,” 1 = “Strongly disagree,” 7 = “Strongly agree”). I reverse-coded these items (such that higher scores indicated increased avoidance) and averaged them into a single measure ($r = .56$) for subsequent analysis.

Results

Consistent with the proposed effect, participants in the MS condition evaluated the exciting brand significantly less favorably than those in the control condition ($M_{MS} = 3.87$, $SD_{MS} = 1.60$ vs. $M_{Control} = 4.56$, $SD_{Control} = 1.31$; $t(89) = -2.24$, $p = .03$, $\eta_p^2 = .05$). Moreover, supporting the proposed mechanism, participants in the MS condition exhibited stronger avoidance of change than those in the control condition ($M_{MS} = 3.46$, $SD_{MS} = 1.40$ vs. $M_{Control} = 2.73$, $SD_{Control} = 1.23$; $t(89) = 2.63$, $p = .01$, $\eta_p^2 = .07$).

I conducted a mediation analysis (Model 4; 5,000 resamples; Hayes 2017) with the MS condition (MS vs. control) as the independent variable, avoidance of change as the mediator, and brand evaluation as the dependent variable. MS had a significant effect on avoidance of change ($\beta = .72$, $SE = .27$, $t(89) = 2.66$, $p = .01$), which in turn had a significant effect on brand evaluation ($\beta = -.49$, $SE = .10$, $t(88) = -4.73$, $p < .001$; see Figure 2.3). The indirect effect of MS on brand evaluation through avoidance of change was negative and significant (95% CI = [-.68; -.08]). After this indirect effect was controlled for, the direct effect of MS on evaluation

of the exciting brand was no longer significant ($\beta = -.33$, $SE = .28$; $t(88) = -1.20$, $p = .24$; 95% $CI = [-.89; .22]$). These results thus supported the proposed mechanism.¹⁵



*** $p < .001$; ** $p < .01$; * $p < .05$

Notes: Solid line represents total effect of MS on brand evaluation; dashed line represents indirect effect of MS on brand evaluation.

Figure 2.3. Study 3: Avoidance of Change Mediated the Detrimental Effect of MS on Evaluation of the Exciting Brand

Study 4: How to Overcome the Effect

Study 4 extended Study 3 in two major ways. First, I used a different, process-by-moderation approach (Spencer, Zanna, and Fong 2005) to test the mechanism behind the detrimental effect of MS on the equity of exciting, but not other, brands. Specifically, I experimentally manipulated the strength of exciting brands' association with the notion of change. Second, Study 4 aimed to identify a means through which firms can overcome the detrimental effect of MS on the exciting brands. Specifically, I tested whether using an advertising tagline that dilutes the association of an exciting brand with the notion of change can attenuate the effect. To further establish generalizability, I also used a different product category—telecommunications—and a different operationalization of the exciting personality based on a different set of the exciting brands' traits (Aaker 1997).

¹⁵ To ensure that the mediation pattern I observed in Study 3 is robust, I conducted a replication study using an online consumer panel ($n = 141$; $M_{age} = 34$ years; 58% women) with a well-established MS induction approach (Florian et al. 2002) and a different, established exciting brand stimulus (Luffarelli et al. 2019, Study 2b). Supporting our proposed mechanism, a significant indirect effect of MS on brand evaluation through avoidance of change was again found ($\beta = -.14$, $SE = .07$, 95% $CI = [-.30; -.02]$).

Design and Procedure

Five hundred and twenty-seven U.S. consumers ($M_{\text{age}} = 35$ years; 51% women) recruited from a consumer panel were randomly assigned according to a 2 (MS vs. control) \times 2 (strong vs. weak association with the notion of change) between-participant design. Participants first completed the same established MS manipulation (Florian et al. 2002) as in Study 2. Before proceeding to the next part of the experiment, participants had a short break, during which they had to read some experimental instructions. Thereafter, participants proceeded to the final, ostensibly unrelated brand evaluation task. Participants read one of the two versions of a short advertising tagline of an exciting brand of an Internet service provider. I embedded two exciting brand personality traits (“up-to-date” and “independent;” Aaker 1997) that fit the target service category in both versions of the tagline. To manipulate how closely the brand was associated with the notion of change, I emphasized aspects related either to change or to lack of change in each of the two versions of the tagline. Specifically, participants assigned to the strong (vs. weak) association with the notion of change condition read the version of the tagline with the slogan “Get connected in a flash!” (vs. “Stay connected forever!”; see Appendix B for details). A pretest with participants from the same population as the main study confirmed that the two versions of the tagline differed as expected in terms of strength of association with the notion of change, but they did not differ in other dimensions such as intensity of exciting brand personality, likability, or quality (see Appendix B for details). As a dependent measure, participants rated the brand on two scale items (1 = “Dislike/bad,” and 7 = “Like/good”). I averaged these items into a single brand evaluation measure for analyses ($r = .86$). Finally, participants responded to the basic demographic measures.

Results

A 2 \times 2 ANOVA on brand evaluation with the MS condition (MS vs. control) and association with the notion of change (strong vs. weak association) as between-participant factors revealed no significant main effects (p 's $> .24$). Importantly, the two-way interaction was significant ($F(1, 523) = 4.20, p = .041, \eta_p^2 = .01$; see Figure 2.4). Consistent with the proposed effect, in the strong association with the notion of change conditions, MS significantly decreased the exciting brand's evaluation ($M_{\text{Control_Strong}} = 5.12, SD_{\text{Control_Strong}} =$

1.15 vs. $M_{MS_Strong} = 4.73$, $SD_{MS_Strong} = 1.51$; $F(1, 523) = 5.22$, $p = .023$, $\eta_p^2 = .02$). In contrast, in the weak association with the notion of change conditions, MS did not significantly affect evaluation of the exciting brand ($M_{MS_Weak} = 5.11$, $SD_{MS_Weak} = 1.41$ vs. $M_{Control_Weak} = 5.01$, $SD_{Control_Weak} = 1.41$; $p = .53$). Furthermore, when mortality was salient, the exciting brand was evaluated significantly less favorably in the strong association than in the weak association with the notion of change condition ($F(1, 523) = 5.01$, $p = .03$, $\eta_p^2 = .02$). When MS was not primed, however, this pattern was not found ($p = .52$).

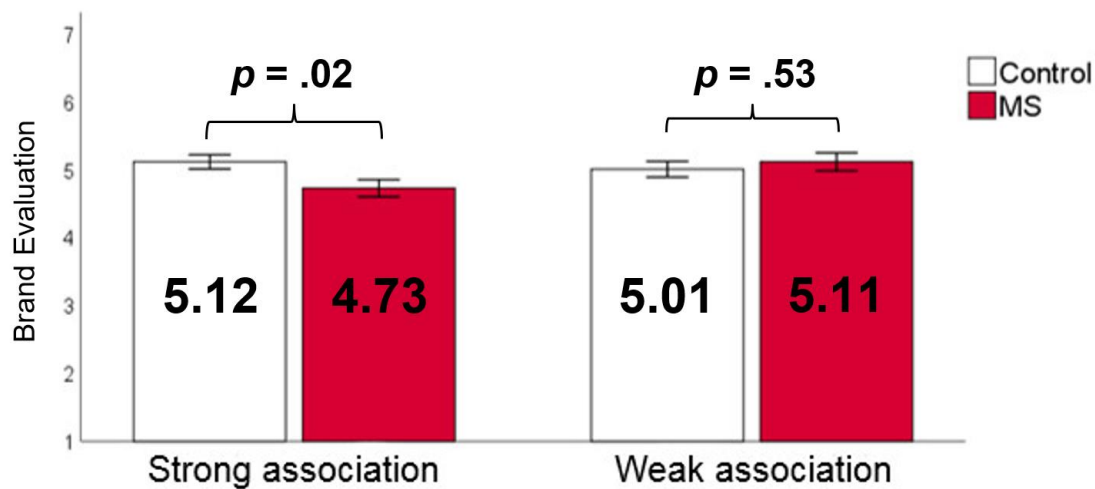


Figure 2.4. Study 4: Weakening Exciting Brands' Association with the Notion of Change Eliminated the Detrimental Effect of MS

Overall, the results of Study 4 offered further support for the underlying mechanism by directly manipulating the strength of association of an exciting brand with the notion of change. In addition, these findings demonstrated how the detrimental effect of MS can be eliminated with the use of a common promotion tactic—an advertising tagline.

General Discussion

This research investigates how mortality salience (MS) may impact brand equity. Through a series of field and experimental studies, I show that MS can decrease equity of brands with an exciting, but not other, personality (Study 1 and Study 2). This occurs because MS drives consumers to avoid change, and because exciting (unlike other) brands tend to be closely associated with the notion of change (Pilot Study, Study 3, and Study 4). I demonstrate the generalizability and robustness of this detrimental effect of MS and its real-world

implications by using a large-scale dataset with thousands of brands from a wide variety of product and service categories, and by using different MS operationalizations (major deadly events that occurred in the field and experimental inductions of MS). Overall, the results document a frequent, real-world phenomenon and emerge across different datasets and methodologies, adding to the potential impact of this work.

This research contributes to the literature in multiple ways. The results add to the research on marketing implications of MS (e.g., Dunn et al. 2020; Ferraro et al. 2005; Huang and Wyer 2015) by identifying a previously undocumented effect of MS in the context of branding. The findings also illustrate that this effect manifests itself at the conceptual level of brand associations. Specifically, this effect emerges due to the relationship between consumers' tendency to avoid change when under MS and close association between an exciting brand personality and the notion of change. Thus, the results suggest that MS can drive consumers to avoid even the idea of change, as, for example, reflected in an exciting brand personality. This underlying process adds to the theories on how MS can impact consumer behavior. Moreover, this research complements the literature on branding and brand personalities (e.g., Aaker 1997; Aaker et al. 2004; Freling et al. 2011, Malar et al. 2012). The results highlight a prevalent context in which consumers may shun away from brands with an exciting (vs. other) personality, resulting in a negative impact on the equity of exciting, but not other, brands. This adds to the understanding of how brand personalities may interact with contextual variables to influence brands. This finding is important, because previous research on brand personality has not yet addressed how exogenous market factors—some of the least researched but potentially impactful (Whitler et al. 2021)—may influence the equity of brands with different personalities. Also complementing the extant branding literature, this research finds that brands with different personalities can be associated with the notion of change to a different degree, and that consumers' inclination to avoid change may alter their evaluations of different brands. In particular, the results show that exciting brands (unlike other types of brands) tend to be closely associated with the notion of change, which consumers tend to avoid when they experience increased MS.

The findings offer important practical insights. First, this research alerts managers of exciting brands—some of the most popular on the market (Luffarelli et al. 2019)—about the potentially adverse effects of mortality-related events on the equity of exciting brands. In so doing, this research provides insights about the changes in consumer preferences that managers may anticipate in the aftermath of death-related events. The findings can be especially relevant when targeting consumer segments that may be particularly MS-sensitive (e.g., experiencing

potential exposures to deadly diseases such as COVID-19, being geographically close to fatal incidents such as deadly shooting). Second, the findings suggest ways in which marketers can overcome this detrimental effect of MS. For example, managers can weaken an exciting brand's association with the notion of change through marketing communications (e.g., advertising taglines as in Study 4). If such marketing communications are not feasible, managers may consider reducing or pausing promotion efforts that emphasize the exciting personality of a brand, especially in media platforms that frequently feature death-related content or during periods when consumers are likely to be heavily exposed to MS-increasing information (e.g., immediately after major deadly events).

The findings suggest several future research directions. Consumption experiences tend to differ in variability and hence may be more (vs. less) closely associated with the notion of change. It thus could be interesting to investigate whether MS may exert a stronger impact on consumers' evaluations of more (vs. less) variable consumption experiences. The mechanism of avoidance of change I uncovered in this research may also be applicable in other important contexts such as financial decision-making and information acquisition. In the domain of financial decision-making, the onset of MS may influence consumers' evaluations of financial products that offer more stable (vs. more variable) returns. In the domain of information acquisition, prior research suggests that whether a set of information is perceived as stable (vs. expandable) can influence consumers' evaluations pertaining to the information (Yang et al. 2019). Thus, the onset of MS may alter peoples' preferences for acquiring different types of information. Moreover, this research uncovered an association between the notion of change and consumers' perceptions of exciting brands. Future research can explore whether a closer association of exciting brands with the notion of change can provide extra returns on equity for brands that operate in industries that welcome change, such as innovation-intensive industries.

Further, it would be important for future research to investigate whether the findings may be contingent on consumers' dispositions and backgrounds. To illustrate, prior research suggests that the extent to which individuals embrace the notion of change differs across cultures (Choi, Koo, and Choi 2007). Thus, it might be that the patterns I observed in this research may depend on a brand's target market. In addition, further work can explore how consumers' chronic traits can influence evaluations of exciting brands under MS. For example, for consumers who chronically seek excitement, such as those high in sensation-seeking (Zuckerman 1971), "avoiding change" may imply keeping their consumption patterns and thus, still preferring exciting brands under MS. Finally, future work can explore situations other than the onset of MS that can also drive consumers to avoid change. For example, it might be

interesting to investigate whether different types of psychological threats may lead to a similar avoidance of change, hence altering consumers' reactions to brands and influencing brand evaluations. Exploring research directions such as the ones above can inform theory and provide important insights for practitioners.

CHAPTER III.
THE IMPACT OF ELECTORAL SUCCESSES AND FAILURES ON BRAND
PREFERENCE

Consumers' personal political leanings—endorsing liberal or conservative ideology—can have profound impact on consumption (Chan and Ilicic 2019; Khan et al. 2013; Ordabayeva and Fernandes 2018). However, little is known about how other common politics-related phenomena can influence consumer behavior. This research seeks to fill this gap in the literature by investigating how elections may impact consumer evaluations of brands with different personalities.

Political elections are one of the most important and widely publicized political events (Campbell 2008; Holbrook 1996; Pew Research Center 2021). In the vast majority of political contests happening in the U.S. in the recent decades, there are only two major candidates. Each candidate clearly stands for either a more liberal or a more conservative ideology (i.e., the candidates of the Democratic vs. the Republican party, respectively). As such, electoral success of the candidate is often interpreted as a success of their political ideology (e.g., the beginning of a liberal political era for the electoral successes of Roosevelt, Kennedy, and Obama vs. the beginning of a conservative political era for the electoral successes of Nixon, Reagan, and Bush; The American Presidency Project 2021). Because brands can be associated with different societal values, beliefs, and ideologies (Shepherd et al. 2015), I propose that an electoral success or a failure can benefit or damage brands that are more closely associated with the ideology the candidate supports. More specifically, I argue that brands with an exciting personality, unlike those with other personalities, are more closely associated with the liberal ideology because the defining features of liberalism share tight connections with exciting brands' image. Thus, consumer evaluations of brands with an exciting (but not other) personality can increase when a liberal candidate achieves electoral success and decrease when the liberal candidate experiences electoral failure. I further propose a perceived popularity-based mechanism that underlies this phenomenon: Consumers infer that a success (a failure) of a liberal candidate indicates an increase (a decrease) in popularity of the liberal ideology and hence, an increase (a decrease) in popularity of brands that more closely reflect the liberal ideology.

Five studies test these propositions. Studies 1a-1b are large-scale field studies that examine how brand evaluations changed during the 2008 and 2004 presidential election cycles;

Study 1a shows that electoral success of a liberal candidate was associated with an increase in consumer evaluations of exciting (but not other) brands, and Study 1b shows that electoral failure had the opposite effect. Studies 2a-2b provide evidence that exciting brands are associated with liberal ideology more closely than other brands, and that electoral success (vs. failure) of a liberal candidate increases (vs. decreases) perceived popularity of exciting brands. Finally, Study 3 demonstrates that perceived popularity mediates the effect of electoral success (vs. failure) of a liberal candidate on consumer evaluations of exciting brands.

This research adds to the consumer research literature in important ways. First, the findings complement the literature on how political ideology impacts consumption (Chan and Ilicic 2019; Khan et al. 2013; Ordabayeva and Fernandes 2018) by demonstrating that political events (i.e., elections) can influence consumer evaluations of brands. This is important because prior works primarily focused on the individual-level consumer characteristics (i.e., self-identifying as a liberal or a conservative), while this research highlights the impact of events at the societal level. In addition, the findings reveal a popularity-based underlying process, adding to psychological mechanisms driving the impact of major ideology-related events on consumer evaluations of different brands. Second, this work complements the literature on branding and brand personality (Aaker 1997; Shepherd et al. 2020) by showing that exciting brands, unlike those with other personalities, are more closely associated with liberal political ideology. In so doing, I highlight a previously undocumented interaction between outcomes of political elections and a brand's personality, which jointly drive consumer evaluations of brands. From a practical perspective, this research provides insights on managing exciting brands—widely prevalent and some of the most influential in the marketplace (Aaker et al. 2004; Luffarelli et al. 2019)—in the times of politically charged events.

Theoretical Background

Liberal Political Ideology and Consumption

Political ideology refers to a general worldview which includes “sets of ideas and values that cohere, that are used publicly to justify political stances, and that shape and are shaped by society” (Dawson 2001, p. 4). In Western societies, such as the U.S., political ideologies often reflect the liberal-conservative spectrum. Because most consumers readily recognize the behavioral manifestations of either ideology (Kerlinger 1984) and tend to behave in line with

the ideology they support (Jost et al. 2009), the liberal-conservative distinction is a parsimonious and valid predictor of opinions and behaviors (Graham et al. 2009; Jost 2006).

The core features that define liberal ideology and differentiate it from conservatism are (a) supporting social change and (b) rejecting inequality (Jost 2006; Jost et al. 2008). Specifically, liberalism seeks progress by supporting social change and advocates that all people are unique but equal. In contrast, conservatism endorses tradition, status-quo, and order, and rationalizes existing social and economic inequalities. Research and meta-analyses show that associations of liberalism with change and tolerance are substantive (Jost et al. 2003), even at the implicit, automatic level (Jost et al. 2008).

Supporting liberal ideology has profound effects on behavior (Cakanlar et al. 2020; Pereira and Stornelli 2020) and consumption decisions (Jost 2017; Jung et al. 2017; Kidwell et al. 2013; Ordabayeva and Fernandes 2018). To illustrate, the two core features of liberal political ideology—seeking change and rejecting inequality—often manifest themselves in consumption behavior as preference for change, novelty, and uniqueness. For example, because liberalism seeks change, consumers who support liberalism are more persuaded by messages appealing to change (Duhachek et al. 2014), are more open to new experiences (Khan et al. 2013), and tend to seek novel, stimulating sensations (Glasgow et al. 1985). Because liberalism rejects inequality of people who are different from the majority, consumers who share liberal ideology are more persuaded by messages appealing to one’s individuality (Kidwell et al. 2013), prefer unique products (Ordabayeva and Fernandes 2018), and tend to seek more variety (Fernandes and Mandel 2014). Although this literature provides important insights into the effects of political ideology on consumption, there have been relatively few studies on the relationship between ideology-related political events and consumer behavior. Filling this gap in the literature, I investigate whether major ideology-related political events such as elections can impact consumer evaluations of brands with different personalities.

Liberal Political Ideology and Brand Personality

Brands can be categorized according to their personalities—sets of human-like characteristics associated with brands, including exciting, sincere, competent, sophisticated, and rugged personalities (Aaker 1997). For example, brands with an exciting personality are perceived by consumers as “daring,” “young,” “unique,” “independent,” “imaginative,” and “up-to-date.” A brand’s personality has important effects on marketing outcomes. For example, prior research has shown that brand personality can impact consumer preference (Swaminathan

et al. 2009), evaluations (Freling and Forbes 2005), attachment to a brand (Malär et al. 2011), loyalty (Brakus et al. 2009; Kressman et al. 2006), reactions to brand transgressions (Aaker et al. 2004), brand equity (Magnusson et al. 2019; Sirianni et al. 2003), and brand financial valuation (Luffarelli et al. 2019).

Brands are also cultural symbols and sources of meaning (McCracken 1986) and thus can reflect important social values and ideologies (Holt 2006; Shepherd et al. 2015). Building on this stream of research, I argue that a brand's personality has the potential to represent political ideologies and the values associated with them. More specifically, I propose that brands with an exciting personality, unlike those with other personalities, tend to reflect liberal political ideology more closely because of the tighter connections between exciting brands and the defining features of liberalism.

The first core feature of liberalism—seeking change and progress (Jost 2006; Jost et al. 2008)—closely resonates with exciting brands' image of being daring, contemporary, and up-to-date. Exciting brands are also perceived as “young” and “imaginative” and tend to target younger consumers (Aaker et al. 2004), and liberalism has been long perceived as the ideology of “young” and “imaginative” because younger people are more likely to support liberal ideas and dream big about new social order (Cutler and Kaufman 1975). Moreover, exciting brands are more congruent with the promotion regulatory focus (Kim and Sung 2013), which is associated with seeking progress and change toward desired end states (Zou et al. 2014).

The second core feature of liberalism—embracing uniqueness and equality of all individuals (Jost 2006; Jost et al. 2008)—is closely associated with consumer perceptions of exciting brands as unique, independent, and standing out from the crowd. For example, prior research has shown that liberal ideology is more supportive of marginalized communities such as LGBTQ and that the exciting brand personality is more congruent with perceptions of such communities (Shepherd et al. 2020). Liberalism accepts the idea of being different and deviating from prior norms and traditions, and exciting brand personality is congruent with deviations from what is typical in language (Ang and Lim 2006), visual design (Luffarelli et al. 2019), and physical sensations (Sundar and Noseworthy 2016).

Finally, prior research has found that characteristics comprising the exciting brand personality tend to be more closely aligned with the consumption patterns of those supporting liberal political ideology. For example, consumers who endorse liberalism tend to seek more exciting consumption experiences (Jost 2017), prefer unique products (Ordabayeva and Fernandes 2018), and products that highlight change (Duhachek et al. 2014).

In summary, due to the tighter alignment between the core features of liberalism and the image and traits of the exciting brand personality, I propose that exciting brands are more closely associated with liberal political ideology than brands with other personalities. Because brand personalities do not share similar associations (Aaker 1997), perceptions of other brand personalities (i.e., sincere, competent, sophisticated, and rugged) may not be strongly associated with liberal political ideology. Indeed, prior research has shown that the five brand personalities have independent effects on consumer evaluations, because consumers perceive different personalities differently (Eisend and Stockburger-Sauer 2013). Thus, I do not anticipate that other brand personalities would have similarly strong associations with liberalism as the exciting brand personality. More formally:

H₁: Brands with an exciting personality are more closely associated with the liberal political ideology than brands with other personalities (i.e., sincere, competent, sophisticated, and rugged).

Political Elections and Evaluations of Exciting Brands

Political elections are one of the most important and widely publicized political events in the U.S. For example, presidential elections attract large public attention and voter participation (Holbrook 1996; Campbell 2008). According to Gallup research (2021), more than 70% of Americans believe that who wins (or loses) presidential elections really matters. In the U.S., most political contests are partisan—the candidates represent major political parties. Currently, the Democratic party represents liberal ideology and the Republican party represents conservative ideology, and these party-ideology connections have become tighter in the last decades (Levendusky 2009). Because of these close connections, the outcome of political elections (e.g., electoral success of a candidate from the Democratic party) is often interpreted as success for the political ideology of the winning candidate (e.g., liberalism).

Prior research has conceptualized political elections as information campaigns (Holbrook 1996) or even narratives about a clash of characters' worldviews that results in definite winners and losers (Campbell 2008). Candidates communicate their ideological positions via holding events, participating in debates, and, more recently, through social media (Berman et al. 2019). To summarize, consumers follow closely the outcomes of elections (Pew Research Center 2021), identify which political ideology each candidate represents

(Levendusky 2009) and, once the outcome is finalized, tend to perceive it as a success or a failure of a particular candidate (Campbell 2008).

While the outcomes of political elections can impact financial markets (Li and Born 2006), their influence on consumption (e.g., household spending) is unclear (Gillitzer and Prasad 2016; Mian et al. 2015). Importantly, the possibility that the election outcomes may impact consumer preference at the brand level remains largely unexplored. This is a research gap this study seeks to fill.

Specifically, I focus on how electoral success or failure of the liberal candidate can influence consumer evaluations of exciting brands. I propose that, because of the close association between brands with an exciting personality and liberal political ideology, exciting brands can vicariously benefit (suffer) when a liberal candidate achieves electoral success (experience electoral failure). This prediction is based on the well-established literature on spillover effects, which has shown that strengths and successes (as well as weaknesses and failures) of one entity can carry over to another tightly linked entity (Balachander and Ghose 2003; Lei et al. 2008; Simonin and Ruth 1998). Spillover effects have been previously documented in the context of political ideology (Peterson 1992), branding (Simonin and Ruth 1998), and consumption (Kidwell et al. 2013). For example, research has shown that individualizing messages can increase recycling intentions among supporters of the liberal ideology, and that this increase can spill over to consumers' intentions to purchase green products (Kidwell et al. 2013). In my research context, the spillover effect would predict that, when a liberal candidate achieves electoral success, consumers would tend to evaluate brands that are more closely associated with liberalism—brands with the exciting personality—more favorably. However, when a liberal experiences electoral failure, consumers would tend to evaluate exciting brands less favorably. Formally, I predict:

H₂: Consumers tend to evaluate exciting brands more (vs. less) favorably when a liberal candidate achieves electoral success (vs. experiences electoral failure).

Achieving success in a political contest normally reflects citizens' support toward the values and ideas that the winner represents. In other words, electoral success of the Democratic candidate typically indicates greater popularity of the liberal values whereas electoral failure indicates greater popularity of the conservative values (Autor et al. 2020). I argue that, due to the close association between the exciting brands and liberal ideology, the inference about popularity of liberal values can spill over to the inferences about popularity of the exciting

brands. More specifically, consumers observing electoral success (failure) of the liberal candidate may infer an increase (a decrease) in popularity of liberal ideology and hence, an increase (a decrease) in popularity of exciting brands. Thus, I propose:

H3: Changes in perceived popularity of exciting brands mediate the relationship between election outcomes and consumer evaluations.

In the following sections, I report five studies that test the proposed effect and its underlying mechanism.

Studies 1a-1b: Field evidence

Studies 1a-1b investigated the impact of the outcomes of presidential elections on consumer evaluations of brands with the exciting personality in a real-world context. Study 1a investigated how electoral success for the liberal ideology – the election of the liberal candidate Barack Obama for U.S. president – affected consumer evaluations of brands. Study 1b examined how electoral failure for the liberal ideology – the election of the conservative candidate George W. Bush for U.S. president – impacted consumer evaluations of brands.

Methodology

Data and variables

Data. The dataset, Brand Asset Valuator (BAV), was provided by a major brand consulting firm, Young & Rubicam. The BAV has been widely used in scholarly research (Batra et al. 2017; Datta et al. 2017; Heitmann et al. 2020; Lovett et al. 2013; Luffarelli et al. 2019; Mizik and Jacobson 2008, 2009; Stahl et al. 2012), because the BAV is commonly thought to be “the most comprehensive global database of consumers perceptions on brands” (Batra et al. 2017, p. 915). Prior research has established the validity of the BAV data and its practical importance for understanding the effects of brand evaluations on online and offline word-of-mouth (Lovett et al. 2013), stock returns (Mizik and Jacobson 2008), sales (Datta et al. 2017), market share (Heitmann et al. 2020), customer lifetime value (Stahl et al. 2012), and firm financial valuation (Mizik and Jacobson 2009).

For the US market, Young and Rubicam collects the BAV dataset on a quarterly basis. I obtained the quarterly BAV dataset for the period of 2004 to 2009.¹⁶ In Study 1a, the dataset included observations collected in the 4th quarter of 2008 (the quarter when the electoral success for the liberal ideology occurred, the “success” period) and the two quarters immediately preceding and following the presidential elections: the 3rd quarter of 2008 and the 1st quarter of 2009 (the “control” period). This balanced dataset¹⁷ tracked consumer perceptions and evaluations of 2,180 unique brands across 27 product and service categories, collected from 30,365 consumers for a total of 6,540 brand-quarter observations. In Study 1b, the dataset covered observations collected in the 4th quarter of 2004 (the quarter when the electoral failure for the liberal ideology occurred, the “failure” period) and the two quarters immediately preceding and following the presidential elections: the 3rd quarter of 2004 and the 1st quarter of 2005 (the “control” period). This balanced dataset included consumer perceptions and evaluations of 1,802 unique brands from 27 product and service categories, as based on responses of 19,750 consumers for a total of 5,406 brand-quarter observations.¹⁸ Both samples in Study 1a and Study 1b were representative of the U.S. population and included major brands (e.g., Google, MTV, Walmart, Six Flags) from a wide variety of product and service categories (e.g., tech, media, retail, entertainment).

Dependent variable – CBBE. To capture consumer evaluations of brands, I used a well-accepted BAV measure of consumer-based brand equity: *CBBE* (higher scores indicate higher CBBE).¹⁹ *CBBE* has been widely used in prior works because it is largely accepted as a valid and meaningful measure of consumer evaluations of brands (Batra et al. 2017; Datta et al. 2017; Heitmann et al. 2020; Lovett et al. 2013; Luffarelli et al. 2019; Mizik and Jacobson 2008, 2009; Stahl et al. 2012).

¹⁶ Because of the time frame of our dataset, I could examine only two election cycles of 2004 and 2008.

¹⁷ The dataset is balanced because I included brands that were tracked in all three quarters, and thus, data for these brands were available.

¹⁸ Over years, the BAV dataset has been becoming more established and thus, more valuable. This explains the increase in the BAV in terms of consumers surveyed and brands tracked.

¹⁹ Prior works have frequently adjusted BAV measures in order to meet research objectives (Batra et al. 2017; Datta et al. 2017; Heitmann et al. 2020; Stahl et al. 2012). Following this research, I adjusted CBBE to limit the potential for mechanical correlations between the dependent and independent variables. Specifically, I excluded the items “unique,” “leader,” and “reliable” from the calculation of CBBE because these items also capture brand personality traits of excitement and competence (Aaker 1997). The adjusted measure correlated strongly with the original, unadjusted BAV measure (in Study 1a, $r = .95$ and in Study 1b, $r = .94$).

Independent variable – brand personality. I operationalized brand personalities as an average of consumers' responses on the items related to the respective brand personality and available in the BAV dataset (Luffarelli et al. 2019). Specifically, I computed measures of *Exciting* (“daring,” “trendy,” “unique,” “independent,” and “up-to-date;” in Study 1a, $\alpha = .63$ and in Study 1b, $\alpha = .61$; Aaker 1997); *Sincere* (average of “friendly,” “original,” and “down-to-earth;” in Study 1a, $\alpha = .78$ and in Study 1b, $\alpha = .77$); *Rugged* (“rugged”); *Competent* (average of “reliable,” “intelligent,” and “leader;” in Study 1a, $\alpha = .72$ and in Study 1b, $\alpha = .68$); and *Sophisticated* (average of “upper-class,” “glamorous,” and “charming;” in Study 1a, $\alpha = .67$ and in Study 1b, $\alpha = .65$) brand personalities. These measures captured consumer perceptions of brand personality at the brand level and corresponded to the proportion of consumers who have believed a given brand to possess a given trait at the time the measures have been collected.

Independent variable – Election. For both Study 1a and Study 1b, an indicator variable *Election* was created to represent election quarters (*Election* = 1; assigned to the data collected in the 4th quarter of 2008 in Study 1a and the 4th quarter of 2004 in Study 1b) and “control” quarters immediately preceding the election (*Election* = 0; assigned to the data collected in the 3rd quarter of 2008 in Study 1a and the 3rd quarter of 2004 in Study 1b) and immediately following the election (*Election* = 2; assigned to the data collected in the 1st quarter of 2009 in Study 1a and the 1st quarter of 2005 in Study 1b).

Control variables. To isolate the effects of *Exciting* brand personality from the effects of other personalities, consumer perceptions of *Sincere*, *Competent*, *Sophisticated*, and *Rugged* brand personalities were included in the estimation as control variables. Moreover, as in prior research (Luffarelli et al. 2019), I controlled for time-variant measures of *Brand Awareness* (i.e., number of respondents who were at least slightly familiar with a brand), *Brand Preference* (i.e., percentage of respondents who indicated that a brand was one of the brands respondents preferred), and *Brand Usage* (i.e., percentage of respondents who indicated that they used a brand regularly). Finally, I controlled for a time-invariant brand's product and service category by using indicator variables *Category*. Table 3.1 provides description of the variables used in Studies 1a-1b.

Table 3.1. Studies 1a-1b: Sample Description

	Study 1a												Study 1b											
	2008 Q3 - "Control"				2008 Q4 - "Victory"				2009 Q1 - "Control"				2004 Q3 - "Control"				2004 Q4 - "Defeat"				2005 Q1 - "Control"			
	Mean	S.D.	Min	Max	Mean	S.D.	Min	Max	M	S.D.	Min	Max	M	S.D.	Min	Max	M	S.D.	Min	Max	M	S.D.	Min	Max
Log(CBBE)	2.38	.91	.21	5.48	2.35	.93	.23	5.51	2.39	.91	.29	5.14	2.61	.94	.21	5.70	2.57	.93	.25	5.73	2.58	.93	.25	5.76
<i>CBBE</i>	15.22	16.14	.23	239.90	14.89	15.72	.26	246.58	15.40	16.25	.33	169.41	19.40	20.04	.23	297.15	18.66	19.23	.28	308.27	18.77	19.39	.28	317.34
Log(Exciting)	2.14	.28	1.32	3.17	2.13	.28	1.24	3.03	2.15	.29	1.05	3.15	2.17	.29	1.26	3.23	2.16	.29	1.33	3.16	2.14	.30	1.25	3.31
<i>Exciting</i>	7.88	2.56	2.74	22.70	7.74	2.54	2.47	19.65	7.98	2.69	1.86	22.44	8.11	2.79	2.53	24.17	8.05	2.73	2.78	22.65	7.91	2.75	2.50	26.51
Log(Sincere)	2.62	.36	1.44	3.59	2.61	.37	1.48	3.66	2.66	.36	1.50	3.67	2.68	.39	.97	3.64	2.68	.39	1.53	3.71	2.67	.39	1.43	3.69
<i>Sincere</i>	13.74	5.53	3.23	35.18	13.54	5.60	3.41	37.94	14.17	5.61	3.48	38.39	14.67	6.16	1.63	37.07	14.62	6.06	3.64	39.88	14.50	6.02	3.17	38.93
Log(Competent)	2.46	.40	1.12	3.52	2.43	.39	1.19	3.61	2.47	.40	1.19	3.60	2.59	.41	1.07	3.70	2.57	.43	0	3.70	2.55	.42	.91	3.75
<i>Competent</i>	11.66	5.05	2.07	32.63	11.31	4.87	2.30	35.97	11.81	5.18	2.29	35.52	13.39	5.82	1.90	39.28	13.26	.48	0	39.30	12.99	5.77	1.47	41.53
Log(Sophisticated)	1.83	.42	.23	3.41	1.80	.43	.53	3.38	1.81	.43	.71	3.45	1.83	.48	.49	3.51	1.84	.47	.38	3.49	1.82	.48	.46	3.47
<i>Sophisticated</i>	5.86	3.64	.25	29.19	5.73	3.63	.69	28.28	5.79	3.71	1.04	30.62	6.12	4.57	.63	32.34	6.15	4.41	.47	31.69	6.06	4.41	.58	31.08
Log(Rugged)	1.73	.53	0	3.53	1.70	.53	0	3.61	1.71	.56	0	3.60	1.64	.59	0	3.87	1.64	.62	0	3.71	1.62	.60	0	3.58
<i>Rugged</i>	5.56	4.32	0	33.13	5.36	4.21	0	35.96	5.58	4.49	0	35.56	5.32	4.94	0	46.75	5.35	5.06	0	39.65	5.15	4.71	0	34.90
Log (Brand Awareness)	5.62	0.62	3.38	8.1	5.67	0.62	3.51	8.16	5.62	0.58	3.19	7.46	5.51	0.55	3.70	8.02	5.48	0.54	3.38	8.05	5.48	0.52	3.73	8.09
<i>Brand awareness</i>	336.63	259.14	28.47	3301.2	354.94	274.41	32.33	3504.99	325.11	223.84	23.24	1736.47	292.22	245.03	39.64	3032.78	284.06	242.66	28.38	3135.35	279.76	222.74	40.52	3273.74
Log (Brand Preference)	3.26	0.64	1.43	4.45	3.28	0.63	1.53	4.45	3.33	0.63	1.42	4.48	3.5	0.58	1.32	4.53	3.50	0.59	1.20	4.52	3.48	0.59	1.58	4.51
<i>Brand Preference</i>	8.71	8.42	0	69.85	8.8	8.29	0	70.57	9.18	8.76	0.11	68.55	10.73	9.83	0	80.00	10.64	9.81	0	67.87	10.63	9.86	0	73.55
Log (Brand usage)	1.93	.92	0	4.47	1.96	.92	0	4.48	1.97	.92	0	4.44	2.10	.96	0	4.52	2.08	.97	0	4.43	2.08	.97	0	4.45
<i>Brand usage</i>	9.50	10.46	0	86.05	9.69	10.44	0	87.08	9.85	10.61	0	83.51	11.57	12.13	0	91.02	11.43	12.15	0	83.19	11.41	12.15	0	84.85
n observations	2,180				2,180				2,180				1,802				1,802				1,802			
n categories	27				27				27				27				27				27			
n consumers	10,183				10,736				9,446				6,688				6,495				6,567			

Model formulation

Typically, presidential election campaigns reach their peak and conclusion in the 4th quarter of the year, when the outcome of a new election is announced (in the data, after the election days on November 4th, 2008 and November 2nd, 2004). Following an announcement of a president-elect, the new electoral success gradually becomes the political status-quo and the impact of triumph of either political ideology is reduced. This process is illustrated in Figure C1 in the Appendix, which plots interest to the candidates from both the liberal and conservative ideologies using Google trends data. For both election cycles of 2004 and 2008, consumer interest in candidates from the liberal and conservative sides sharply increased in the 4th quarter and, once the winner was announced, consumer interest dropped and leveled off in the 1st quarter of a subsequent year. These insights were instrumental in specifying the following estimation model:

$$(3.1.) \text{Log}(CBBE)_{it} = \beta_0 + \beta_1 \text{Log}(\text{Exciting})_{it} + \beta_2 \text{Election}_t + \beta_3 \text{Log}(\text{Exciting})_{it} \times \text{Election}_t + \delta X_{it} + \varepsilon_{it},$$

where $\text{Log}(CBBE)_{it}$ was the natural logarithm of CBBE of brand i in quarter t , $\text{Log}(\text{Exciting})_{it}$ was the natural logarithm of the rating of exciting brand personality of brand i in quarter t , Election_t was the indicator variable representing quarters of the election ($\text{Election} = 1$), and before ($\text{Election} = 0$) and following ($\text{Election} = 2$) the presidential election, δX_{it} was a vector of control variables that I detailed previously and their corresponding coefficients, and ε_{it} was a random error term.

I specified a log-log model for several reasons. The dependent variable $CBBE$ followed a log-normal distribution, the estimation of a log-log model was more efficient than the estimation of a linear-linear or log-linear model (e.g., root MSE was smaller), and the interpretation of coefficients as elasticities was more straightforward. For all log-transformed variables, I used a $\log(x + 1)$ transformation to accommodate zero values.

I specified the quarter immediately before the election as the base quarter ($\text{Election} = 0$). Thus, the primary interest was in coefficient β_3 that captured the change in $CBBE$ of brands with the *Exciting* personality in the election quarter ($\text{Election} = 1$) and the quarter following an announcement of election outcomes that became the political status-quo ($\text{Election} = 2$). I used an ordinary least squares regression and clustered errors at the brand level to accommodate any possible brand-level variation correlated across quarters.

Study 1a: Results

I first estimated the model with the control variables only (Model 1 in Table 3.2), and then added the variables of interest: *Exciting*, *Election*, and their interaction (Model 2 in Table 3.2). Finally, to explore whether election outcomes impacted brands with other personalities, I included the four interaction terms between *Election* and *Sincere*, *Competent*, *Sophisticated*, and *Rugged* brand personalities (Model 3 in Table 3.2).

The analysis revealed a significant positive *Exciting* × *Election* interaction in the election quarter ($\beta = .08$, $t(2,098) = 3.06$, $p = .002$) and a non-significant *Exciting* × *Election* interaction in the quarter when Barack Obama's electoral success became a political status-quo ($\beta = -.01$, $t(2,098) = -0.31$, $p = .76$). Figure 3.1 visualizes the average marginal effect of *Exciting* on *CBBE* across quarters. Overall, the results indicated that in the quarter when electoral success of the liberal candidate occurred, as compared to the quarter immediately preceding it, a 1% increase in consumer perceptions of *Exciting* brand personality resulted in an approximately .08% additional increase in *CBBE*.²⁰ In contrast, the effect of *Exciting* on *CBBE* in the quarter when Barack Obama's electoral success became a political status-quo was not statistically different from the quarter before presidential elections, indicating that consumer evaluations of the exciting brands returned to the pre-election levels. Together, these results supported the proposition that electoral success for the liberal ideology in presidential elections was associated with a temporary increase in consumer evaluations of the exciting brands.

Finally, the results of Model 3 that included interactions between *Election* and each of the brand personalities revealed only a significant positive *Exciting* × *Election* interaction in the election quarter ($\beta = .09$, $t(2,090) = 2.96$, $p = .003$); no other interaction between the *Election* dummy and any of the other brand personalities was significant. These findings thus showed that electoral success of the liberal candidate in the presidential elections had a statistically significant impact on evaluations of brands with the exciting, but not any other, personality.

²⁰ The results can be interpreted as elasticities because I estimated a log-log model. Following Wooldridge (2010), I interpreted the $\log(x + 1)$ coefficients as if they were $\log(y)$: “Generally, using $\log(1 + x)$ and then interpreting the estimates as if the variable were $\log(y)$ is acceptable when the data on y contain relatively few zeros” (p. 193), which is the case in our data.

Table 3.2. Studies 1a-1b: Summary of Results

	Study 1a						Study 1b					
	Model 1		Model 2		Model 3		Model 4		Model 5		Model 6	
	β	SE	β	SE	β	SE	β	SE	β	SE	β	SE
<i>Exciting</i>			.481***	.032	.470***	.034			.695***	.035	.696***	.037
<i>Election</i> (election period)			-.186***	.056	-.170**	.075			.116**	.057	.185**	.082
<i>Election</i> (after election period)			-.014	.056	-.035	.075			.023	.058	.145*	.083
<i>Exciting</i> × <i>Election</i> (election period)			.079**	.026	.091**	.031			-.054**	.026	-.074**	.031
<i>Exciting</i> × <i>Election</i> (after election period)			-.008	.026	.014	.032			.005	.027	.020	.032
<i>Sincere</i>	.27***	.026	.248***	.025	.259***	.028	.238***	.029	.223***	.027	.226***	.030
<i>Sincere</i> × <i>Election</i> (election period)					-.036*	.021					-.004	.022
<i>Sincere</i> × <i>Election</i> (after election period)					.002	.020					-.004	.022
<i>Competent</i>	.56***	.024	.540***	.023	.526***	.026	.557***	.030	.549***	.027	.574***	.03
<i>Competent</i> × <i>Election</i> (election period)					.031	.019					-.027	.023
<i>Competent</i> × <i>Election</i> (after election period)					.012	.018					-.046**	.023
<i>Sophisticated</i>	.32***	.016	.181***	.017	.198***	.021	.299***	.017	.148***	.018	.140***	.021
<i>Sophisticated</i> × <i>Election</i> (election period)					-.021	.019					.035*	.019
<i>Sophisticated</i> × <i>Election</i> (after election period)					-.030	.020					-.010	.019
<i>Rugged</i>	.018	.012	-.017	.011	-.019	.014	.130***	.014	.081***	.013	.084***	.015
<i>Rugged</i> × <i>Election</i> (election period)					.009	.013					-.005	.014
<i>Rugged</i> × <i>Election</i> (after election period)					-.004	.013					-.004	.015
Brand Awareness	.26***	.014	.254***	.014	.254***	.014	.325***	.021	.307***	.021	.307***	.021
Brand Preference	.42***	.023	.370***	.022	.369***	.022	.380***	.026	.314***	.024	.314***	.024
Brand Usage	.17***	.021	.200***	.02	.200***	.020	.142***	.025	.192***	.022	.192***	.022
Product & Service Category		Yes		Yes		Yes		Yes		Yes		Yes
R ²	.87		.88		.88		.86		.88		.88	
n observations	6,386		6,386		6,386		5,145		5,145		5,145	

Notes: In Study 1a, the 3rd quarter of 2008 is taken as the base category; in Study 1b, 3rd quarter of 2004 is taken as the base category. For variable *Election*, a comparison category is indicated in brackets: "Election period" corresponds to the comparison of the base quarter to the 4th quarter of 2008 and the 4th quarter of 2004 in Study 1a and Study 1b, respectively; "After election period" corresponds to the comparison of the base quarter to the 1st quarter of 2009 and the 1st quarter of 2005 in Study 1a and Study 1b, respectively. OLS regression with standard errors clustered by brand.

*** $p < .001$, ** $p < .05$, * $p < .10$

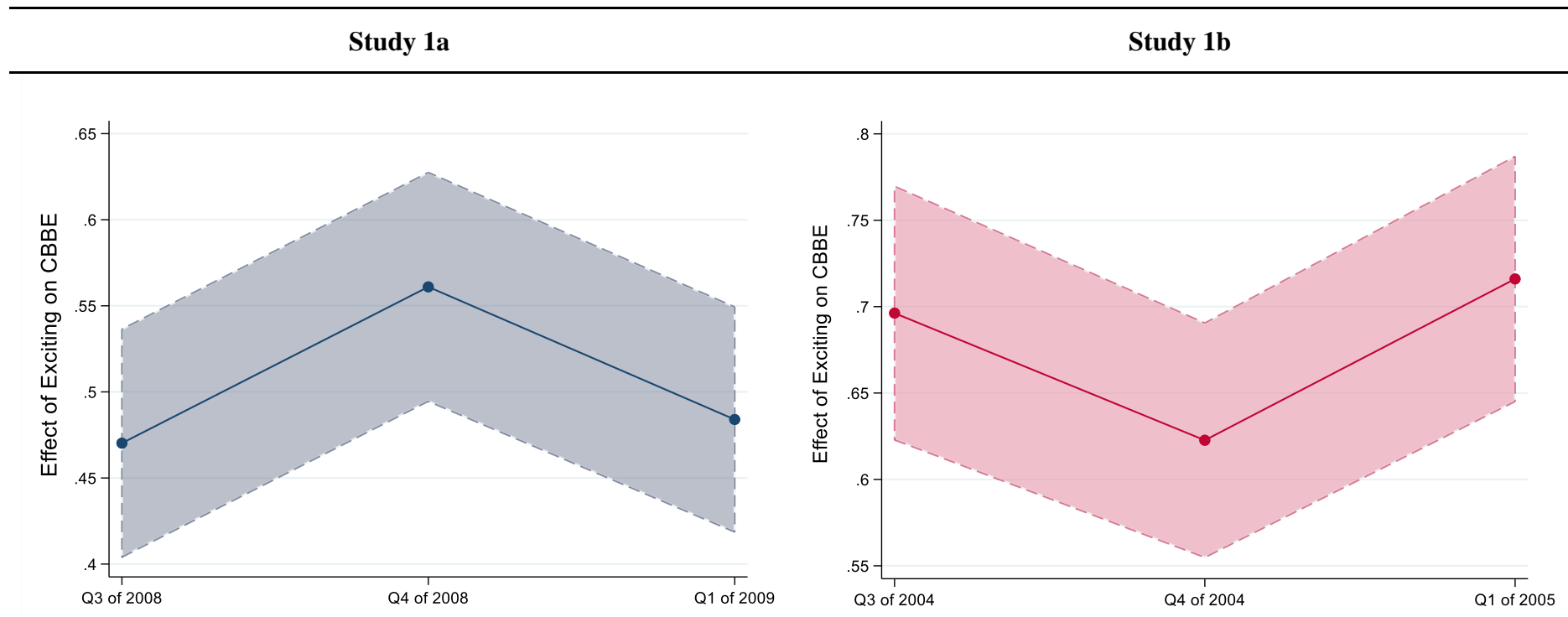


Figure 3.2. Impact of election outcomes across levels of the exciting brand personality

Study 1b: Results

I conducted a similar analysis as in Study 1a. The only difference was that *Election* was operationalized using the 4th quarter of 2004 (the “electoral failure” period) and the quarters preceding (the 3rd quarter of 2004) and following it (the 1st quarter of 2005).

The analysis showed a significant negative *Exciting* × *Election* interaction in the election quarter ($\beta = -.05$, $t(1,678) = -2.09$, $p = .037$) and a non-significant *Exciting* × *Election* interaction in the quarter when John Kerry’s electoral failure became a political status-quo ($\beta = .01$, $t(1,678) = 0.18$, $p = .86$; see Figure 1 for a visualization of the average marginal effects of *Exciting* on *CBBE* across quarters). These results indicated that in the quarter when electoral failure of the liberal presidential candidate occurred, as compared to the quarter immediately preceding it, a 1% increase in consumer perceptions of *Exciting* brand personality was associated with an approximately .05% decrease in *CBBE*. Moreover, the effect of *Exciting* on *CBBE* in the quarter when John Kerry’s electoral failure became a political status-quo was not statistically different from the quarter before presidential elections, suggesting that consumer evaluations of the exciting brands bounced back to the pre-election levels. Thus, these findings provided further support to the proposition that the electoral failure for the liberal ideology is associated with a temporary decrease in consumer evaluations of exciting brands.

Finally, I examined the results of Model 6 that included interactions between *Election* and each of the brand personalities. In the election quarter, I again found a significant negative *Exciting* × *Election* interaction in the election quarter ($\beta = -.07$, $t(1,670) = -2.36$, $p = .018$); no other interaction between the *Election* dummy and any of the other brand personalities was significant. The other significant interaction was found in the post-election quarter and hence was likely unrelated to the elections; compared to the quarter before presidential elections (the 3rd quarter of 2004), in the quarter following presidential election (the 1st quarter of 2005) the effect of *Competent* brand personality on *CBBE* decreased ($\beta = -.04$, $t(1,670) = -2.02$, $p = .043$). Overall, the results demonstrated that the electoral failure of the liberal candidate in the presidential elections had a statistically significant impact on evaluations of brands with the exciting, but not any other, personality.

Discussion

Taken together, the results of Studies 1a-1b documented the effect of election outcomes on consumer evaluations of brands with the exciting, but not other, personality. Study 1a showed that electoral success of Barack Obama, liberal presidential candidate in the U.S. 2008 elections, increased consumer evaluations of brands with the exciting personality. Study 1b found that electoral failure of John Kerry, liberal presidential candidate in the U.S. 2004 elections, decreased consumer evaluations of brands with the exciting personality. In both Studies 1a-1b, I observed this effect only for the exciting, and not other, brands. These studies demonstrated the important implications of the results for real brands across many product and service categories in the marketplace.

Study 2a: Are brands with the exciting brand personality more closely associated with the liberal political ideology?

Study 2a tested the hypothesis that brands with the exciting personality are more closely associated with the liberal political ideology than brands with other personalities.

Method and participants

Seventy-seven U.S. consumers ($M_{\text{age}} = 37$ years; 52% female; $M_{\text{liberal}} = 5.7$ on 1-9 scale) from a consumer panel participated in this within-participants study. Each participant saw short brand descriptions containing traits of all five brand personalities, which were presented one brand description at a time (15 descriptions in total, corresponding to brand personality traits that “most reliably, accurately, and comprehensively represent the five dimensions” of brand personality; see Aaker 1997, p. 351). For each brand description, participants rated the extent to which they associated a given brand with the liberal political ideology (1 = to a very small extent, 7 = to a very large extent). At the end of the study, participants responded to the basic demographic measures.

Results and discussion

Participants’ responses were averaged into an index of brand-ideology association for all facets comprising the same personality (for the exciting, the sincere, and the competent

brand personalities, α 's $> .82$; and for the sophisticated and the rugged brand personalities, r 's $> .21$). A series of paired-samples t-tests showed that the exciting brand personality ($M = 4.83$, $SD = 1.32$) was more strongly associated with the liberal political ideology, compared to the sincere personality ($M = 4.19$, $SD = 1.53$; $t(76) = 5.89$, $p < .001$, Cohen's $d = .67$), competent personality ($M = 4.36$, $SD = 1.36$; $t(76) = 5.20$, $p < .001$, Cohen's $d = .59$), sophisticated personality ($M = 4.02$, $SD = 1.19$; $t(76) = 6.57$, $p < .001$, Cohen's $d = .75$), or rugged personality ($M = 3.26$, $SD = 1.23$; $t(76) = 10.49$, $p < .001$, Cohen's $d = 1.20$).

I also examined whether participants' political orientation impacted the results above by including a self-reported measure of political orientation (1 = very liberal, and 9 = very conservative; Ordabayeva and Fernandes 2019) as a covariate. Specifically, I conducted a repeated measures analysis with the five brand-ideology association measures (one for each of the five brand personalities) and participants' political orientation as a covariate. I found a significant interaction among participants' ratings of brand-ideology association and their political orientation ($F(4) = 10.48$, $p < .001$). Participants who more strongly endorsed the liberal political ideology (i.e., those below the median of "4") reported more strong associations of all five brand personalities with the liberal political ideology ($M_{exciting} = 5.35$, $SD_{exciting} = 1.03$ vs. $M_{sincere} = 4.98$, $SD_{sincere} = .99$ vs. $M_{competent} = 5.06$, $SD_{competent} = .95$ vs. $M_{sophisticated} = 4.35$, $SD_{sophisticated} = 1.04$ vs. $M_{rugged} = 3.66$, $SD_{rugged} = .97$). In contrast, participants who more strongly endorsed the conservative political ideology (i.e., those above the median of "4") reported less strong associations of all five brand personalities with the liberal political ideology ($M_{exciting} = 4.24$, $SD_{exciting} = 1.38$ vs. $M_{sincere} = 3.28$, $SD_{sincere} = 1.54$ vs. $M_{competent} = 3.56$, $SD_{competent} = 1.34$ vs. $M_{sophisticated} = 3.64$, $SD_{sophisticated} = 1.25$ vs. $M_{rugged} = 2.81$, $SD_{rugged} = 1.33$). Importantly, both types of participants found the exciting brand personality to be more strongly associated with the liberal political ideology than any other personality (all $ps < .01$).

Together, the results of Study 2a demonstrated that the exciting brand personality tends to be more closely associated with the liberal political ideology than other brand personalities.

Study 2b: Does liberal electoral success (vs. failure) impact perceived popularity of the exciting brand?

Study 2b tested whether electoral success (vs. failure) of the liberal side can increase (vs. decrease) perceived popularity of exciting brands.

Method and participants

One hundred and ninety-six U.S. consumers ($M_{\text{age}} = 39$ years; 51% female; $M_{\text{liberal}} = 5.95$ on 1-9 scale) from a consumer panel participated in the study. Participants were randomly assigned to one of the two conditions (expected outcome for the liberal candidate: electoral success vs. failure) in a between-participant experiment. Participants were asked to imagine that a liberal candidate is expected to win (vs. lose) the presidential election in a country they were visiting (see Appendix C for stimuli). After reading the scenario, participants were asked to write down their thoughts about what political ideology most citizens of this unspecified country were likely to support.

Participants then proceeded to a brand evaluation task. They imagined that, while visiting this country, they went out for drinks and were recommended a brand of beer described as exciting (see Appendix C for stimuli). After reading this description, participants estimated the popularity of this brand of beer in the country they were visiting (0 = not popular at all, 100 = extremely popular), which served as the dependent variable. At the end of the study, participants responded to the basic demographic measures.

Results and discussion

An independent samples t-test with experimental condition (expected outcome for the liberal candidate: electoral success vs. failure) as an independent variable and participants' ratings of perceived brand popularity as a dependent variable revealed that participants in the electoral success condition thought that the exciting brand was significantly more popular than participants in the electoral defeat condition ($M_{\text{success}} = 63.80$, $SD_{\text{success}} = 20.79$ vs. $M_{\text{failure}} = 50.41$, $SD_{\text{failure}} = 25.15$, $t(194) = 4.07$, $p < .001$, $\eta_p^2 = .08$).

I also examined whether participants' own political orientation impacted the results. Specifically, I conducted an ANOVA with experimental condition (expected outcome for the liberal candidate: electoral success vs. failure) as an independent variable, a self-reported measure of political orientation (1 = very liberal, and 9 = very conservative; Ordabayeva and Fernandes 2019) as a covariate, and participants' ratings of perceived brand popularity as a dependent variable. In this analysis, I found again a significant effect of the experimental condition ($F(1, 193) = 16.66$, $p < .001$; $\eta_p^2 = .08$) while the effect of participants' political orientation was not significant ($F(1, 193) = .47$, $p = .49$).

Overall, the results of Study 2a showed that an expectation of electoral success (vs. failure) of the liberal candidate can significantly increase (vs. decrease) perceived popularity of the exciting brand.

Study 3: Does a change in perceived popularity mediate the effect of liberal electoral success (vs. failure) on consumer evaluations of the exciting brand?

Study 3 tested the entire conceptual model by examining whether electoral success (vs. failure) impacts perceived popularity of the exciting brand, which in turn increases (vs. decreases) exciting brand's evaluations.

Method and participants

Two hundred and one U.S. consumers ($M_{\text{age}} = 35$ years; 53% female; $M_{\text{liberal}} = 4.79$ on 1-9 scale) from a consumer panel participated in the study. Participants were randomly assigned to one of the two conditions (expected outcome for the liberal candidate: electoral success vs. failure) in a between-participant experiment. First, participants completed the same task as in Study 2b: Participants were asked to imagine that a liberal candidate is expected to win (vs. lose) the presidential election in a country that they were visiting, and to describe the political ideology that most citizens of the country likely supported.

After this task, participants proceeded to an ostensibly unrelated brand evaluation task. Participants read a short description of an exciting brand of apparel (see Appendix C for stimuli and pretest). For the dependent measure of brand evaluation, participants indicated their attitude toward the brand on a 3-item scale (1 = bad / unfavorable / negative, and 7 = good / favorable / positive; Aaker and Schmitt 2001). Responses on these items were averaged to a single measure of brand evaluation ($\alpha = .97$). For the mediation measure, participants estimated the percentage of people who liked the exciting brand (scale 0-100).

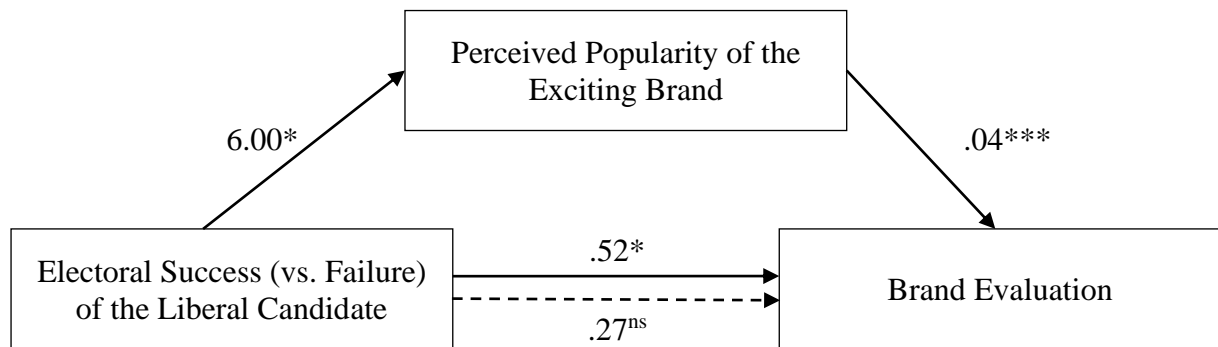
Finally, participants completed an attention check and basic demographic measures. I used the attention check question as an exclusion criterion (Oppenheimer, Meyvis, and Davidenko 2009); eight participants did not pass the attention check, leaving a sample of 193 participants.

Results and discussion

Brand evaluation. An independent samples t-test with the experimental condition (expected outcome for the liberal candidate: electoral success vs. failure) as an independent variable and brand evaluation as a dependent variable revealed a significant effect of experimental condition ($t(191) = 2.35, p = .020, \eta_p^2 = .03$). Consistent with the proposition, participants in the electoral success condition evaluated the exciting brand significantly more favorably than participants in the electoral failure condition ($M_{\text{victory}} = 5.42, SD_{\text{victory}} = 1.30$ vs. $M_{\text{defeat}} = 4.90, SD_{\text{defeat}} = 1.70$).

I also examined whether participants' political orientation impacted the results. Specifically, I conducted an ANOVA with experimental condition (expected outcome for the liberal candidate: electoral success vs. failure) as an independent variable, a self-reported measure of political orientation (1 = very liberal, and 9 = very conservative; Ordabayeva and Fernandes 2019) as a covariate, and brand evaluation as a dependent variable. In this analysis, I found again a significant effect of the experimental condition ($F(1, 190) = 4.88, p = .028; \eta_p^2 = .03$) while the effect of participants' political orientation was not significant ($F(1, 190) = 1.75, p = .19$).

Mediation analysis. I conducted a mediation analysis (Model 4, Hayes 2017; 5,000 resamples) with the experimental condition (expected outcome for the liberal candidate: electoral success vs. failure) as an independent variable, perceived popularity of the exciting brand as a mediator, and brand evaluation as a dependent variable. Consistent with expectations, this analysis showed a significant effect of electoral success (vs. failure) on perceived brand popularity ($\beta = 6.00, t(191) = 2.07, p = .039$; see Figure 3.2). Participants in the electoral success condition deemed the exciting brand to be more popular than participants in the electoral failure condition ($M_{\text{victory}} = 61.81, SD_{\text{victory}} = 20.30$ vs. $M_{\text{defeat}} = 55.81, SD_{\text{defeat}} = 19.96$). In turn, perceived brand popularity had a significant, positive effect on brand evaluation ($\beta = .04, t(190) = 9.07, p < .001$). Consistent with the proposed account, the significant indirect effect indicated that electoral success (vs. failure) of the liberal candidate increased evaluation of the exciting brand through perceived brand popularity ($\beta = .24, SE = .12; 95\% CI = [.013; .492]$). When this indirect effect was controlled for, the direct effect of electoral success (vs. failure) on evaluation of the exciting brand became non-significant ($\beta = .27, SE = .18; 95\% CI = [-.085; .637]$).



*** $p < .001$; * $p < .05$

Notes: Solid line represents total effect of Electoral Success (vs. Failure) on Brand Evaluation; dashed line represents direct effect of Electoral Success (vs. Failure) on Brand Evaluation.

Figure 3.2. Study 3: Perceived brand popularity mediated the effect of electoral success (vs. failure) on consumer evaluations of the exciting brand

I repeated the mediation analysis above, including a self-reported measure of political orientation (1 = very liberal, and 9 = very conservative; Ordabayeva and Fernandes 2019) as a covariate. Similar to the results of the main analysis, I found a marginally significant indirect effect of electoral success (vs. failure) of the liberal candidate on the evaluation of the exciting brand through perceived brand popularity ($\beta = .22$, $SE = .12$; 93% $CI = [.008; .460]$). Participants' political orientation did not significantly influence perceived popularity of the exciting brand ($\beta = .94$, $t(190) = 1.38$, $p = .17$) or brand evaluations ($\beta = .03$, $t(189) = .62$, $p = .53$).

Overall, the results of Study 3 provided support for the proposition electoral success (vs. failure) of the liberal candidate can increase (vs. decrease) consumer evaluations of brands with the exciting personality, and that this effect is due to a change in perceived popularity of the exciting brand.

General Discussion

This research investigates how political events, such as elections, impact consumer evaluations of brands with different personalities. I show that brands with an exciting (but not

other) personality are more closely associated with the liberal political ideology (Study 2a) and thus, tend to be evaluated more (vs. less) favorably when liberal candidate achieves electoral victory (vs. experiences electoral defeat; Studies 1a-1b). This effect is explained by the changes in perceived popularity of the exciting brand (Study 2b and Study 3). I demonstrate the generalizability and robustness of the effect and its real-world implications by utilizing large-scale datasets involving thousands of brands from a wide variety of product/service categories and by using various methodologies (field studies examining major political events and experimental inductions of electoral success vs. failure).

This research contributes to the marketing literature in multiple ways. The findings add to the current knowledge about political ideology and branding (Chan and Ilicic 2019; Khan et al. 2013; Ordabayeva and Fernandes 2018). While prior research primarily focused on the impact of political ideology at the individual consumer level (i.e., consumer's self-identification with a liberal or conservative political ideology), this work investigates the influence of political ideology at the societal level (i.e., electoral successes or failures of liberal candidates). Thus, the findings complement prior literature by highlighting the impact of major political events—political elections—on consumer evaluations of different brands. I also add to the prior works on the impact of political contests on consumption (Gillitzer and Prasad 2016; Mian et al. 2015). Past studies have shown little influence of the election outcomes on general consumption patterns, such as household spending. By focusing on different types of brands, the findings suggest that electoral successes and failures can have a more nuanced influence; they can affect consumption through differences in consumer evaluations of specific groups of brands, such as, brands with an exciting personality. Moreover, the findings highlight an underlying perceived popularity-based process behind the impact of political elections on consumer brand evaluations. Thus, this research provides an insight into psychological mechanisms driving the impact of major ideology-related events on consumer evaluations of different brands.

This work also complements the extant literature on branding and brand personality (Aaker 1997; Malär et al. 2012; Shepherd et al. 2015). The findings uncover a previously undocumented link between political ideologies and brand perceptions. Prior research has argued that brands can represent important societal values (Shepherd et al. 2015). I add to this literature by documenting the association between the liberal political ideology and brands with an exciting personality. In addition, recent research has highlighted the need for a more thorough understanding of exogenous influences that can impact both the marketplace and brands, such as the impact of political events like Brexit (Whitler et al. 2021). The research

addresses this call and highlights how one such exogenous influence—electoral successes and failures—can impact consumer evaluations of different brands.

Finally, this research provides practical insights for marketers. This work highlights the role of political ideology and major political events in driving routine behaviors that are not connected to ideology in an apparent way. Because this work examines the impact of societal events—the outcomes of political elections—the findings are scalable and can inform marketing decisions that target consumers of all political leanings.

The results are relevant to managers of brands with an exciting personality. Exciting brands, such as Monster Energy, Nike, Taco Bell, T-Mobile, Vice, Tik Tok, and Axe, operate across many different product and service categories, and are some of the most influential in the marketplace (Aaker et al. 2004; Luffarelli et al. 2019). The findings provide practitioners with guidance on how to manage these brands during political contests, such as presidential, state, or municipal elections. Specifically, in anticipation of the liberal candidate's electoral success, managers can adjust the exciting brands' 5P mix (i.e., product, price, promotion, place, and people) to benefit from more favorable consumer evaluations. For example, more stock units can be added to the inventory to meet the increase in consumer sentiment. On the flip side, if the liberal candidate is expected to lose the election, managers can consider investing additional efforts and resources in promotion to overturn a temporary decrease in consumer evaluations of the exciting brands.

This work opens up several possibilities for future research. First, research would benefit from a multi-level analysis, focusing on the interplay between consumers' own political orientations and major political events. The empirical samples were fairly moderate ideologically (4 to 6 on 1-9 scale; Studies 2-3) or representative of the entire U.S. population (Studies 1a-1b). Thus, of great interest could be investigating the tails of the ideological distribution—reactions of consumers who identify as ultra-liberal or ultra-conservative. For example, ultra-conservative consumers may boycott brands associated with liberal ideology following an important liberal electoral success or if the association between the exciting brands and liberalism is made explicit. Relatedly, it would be interesting to extend the effect to other types of major political events that either implicate liberal success or not. For example, the Black Lives Matter movement has made liberal ideology salient during the protests of summer 2020, yet it did not necessarily grant success for the liberal ideology. In contrast, legalization of gay marriage in the summer of 2015 was a major success for liberalism and could have had similar effects on consumer evaluations of the exciting brands.

Second, it would be interesting to examine how individual-level differences influence the effect. For example, individual's competitiveness (Ryckman et al. 1996) can color how important winning (or losing) is to an individual, thus amplifying or inhibiting their response to election outcomes and subsequent spillover to brand evaluations. Self-construal (Markus and Kitayama 1991) could also moderate the relationship between election outcomes and evaluations of exciting brands. Because interdependents (vs. independents) are more focused on maintaining harmony with the community, individuals with interdependent self-construal can be more receptive to the trending public sentiment and evaluate exciting brands even more (less) favorably when the liberal candidate achieves electoral success (experiences electoral failure). Further work can benefit from exploring whether and how these factors may qualify the effect of political election outcomes on consumer evaluations of different brands. Exploring research directions such as the ones above can inform theory and provide important insights for practitioners.

CONCLUSION

This thesis adopted a macro-level perspective to the study of consumers' brand preferences and investigated how major, large-scale factors can impact brands. Past research has uncovered many important brand-related and consumer-related characteristics that can influence brand preference. However, less is known about the impact of large-scale factors on consumers' preferences for brands. In this thesis, I focus on the influence of three important macro-level factors—new technologies, deadly threats, and sociopolitical events, and the psychological mechanisms underlying their influence.

Chapter 1 explored how consumers' brand preferences are shaped in the context of crowdfunding: an increasingly prevalent way of financing new product development. I proposed that non-semantic brand names (words that do not evoke a specific meaning) can stimulate consumers' curiosity about a new product more than semantic brand names (words that evoke a specific meaning). Because consumers are often motivated by curiosity on crowdfunding platforms (Chan et al. 2019; Herrero et al. 2019), I argued that non-semantic brand names can affect crowdfunding outcomes positively. I tested this theorizing in three studies. To ensure robustness and generalizability of the findings, I used different empirical methodologies, field and lab datasets, and various brand names.

The results of Chapter 1 add to the marketing literature by investigating brand naming effects in the context of crowdfunding. New product development (Brexendorf et al. 2015; Klink and Athaide 2010) and crowdfunding (Simpson et al. 2020; Rose et al. 2020) substantively differ from traditional marketing settings. As such, the traditional marketing playbook may not be always applicable to these novel contexts. Indeed, unlike the common marketing recommendation, my findings show that semantic brand names can be disadvantageous on crowdfunding platforms. The results also complement research about new product development and crowdfunding (Simpson et al. 2020; Zhang and Chen 2019) by offering a curiosity-based framework for understanding consumers' decision-making process when crowdfunding new products. This research also offers practical and cost-effective recommendations that marketers can follow to create more viable crowdfunding campaigns, brand their new products more successfully, and stimulate consumers' curiosity more strongly.

Chapter 2 explored how consumers' brand preferences are influenced by deadly events, such as terrorist attacks or deadly pandemics. Based on prior research, I argued that mortality salience can make consumers avoid change in consumption. Because brands with an exciting (but not other) personality are more closely associated with the notion of change, consumers

tend to prefer exciting brands less when mortality is salient. I tested this theorizing in four studies that used different methodologies, field and lab datasets, and different operationalizations of mortality salience and brand personality.

The findings of Chapter 2 complement the marketing literature and offer actionable managerial insights. This research identified a previously undocumented, detrimental effect of mortality salience on brands with an exciting (but not other) personality, thus adding to the growing work on how mortality salience affects marketing (Dunn et al. 2020; Ferraro et al. 2005; Huang et al. 2018). The findings also showed that this effect manifests itself at the level of conceptual associations between a brand personality and the notion of change. This suggests a novel theoretical implication that consumers may avoid even the mere idea of change under mortality salience. The results of Chapter 2 also add to the literature on branding and brand personalities (Aaker 1997; Aaker et al. 2004) by demonstrating that a prevalent contextual variable—existential threat—can interact with brand personality to influence preferences for brands. This is an important finding because prior works tended to focus on how different brand personalities interact with brand characteristics (Brasel and Hagtvedt 2016; Labrecque and Milne 2012; Wentzel 2009) or consumer characteristics (Chun and Davies 2006; Malär et al. 2011; Swaminathan et al. 2009). Less is known about the interplay between brand personalities and contextual variables such as mortality salience-inducing events. This research thus helps fill this gap in the brand personality literature. Finally, the findings offer important practical implications by highlighting the adverse effects of mortality salience-increasing events on consumers' preferences for exciting brands and identifying a means through which marketers can overcome this negative effect: by reducing the association between exciting brands and the notion of change.

Chapter 3 explored how consumers' preferences for brands can be affected by major sociopolitical events, such as presidential elections. I proposed that brands with an exciting (but not other) personality are closely associated with the liberal political ideology. Because of this association, the electoral success of a liberal candidate tends to increase consumers' preferences for brands with an exciting personality. An electoral failure has the opposite effects. Changes in perceived popularity of exciting brands underlie this phenomenon. I tested this theorizing in five studies that employed different methodologies, field and lab datasets, and different operationalizations of brand personality.

The findings of Chapter 3 further the marketing literature in important ways. This research complements the literature on how political ideology impacts consumption (Chan and Ilicic 2019; Khan et al. 2013; Ordabayeva and Fernandes 2018) by demonstrating that

sociopolitical events (i.e., presidential elections) can influence brands. This is important because prior works primarily focused on the individual-level consumer characteristics (i.e., self-identifying as a liberal or a conservative). In contrast, this research highlights the impact of events at the societal level. In addition, the findings reveal a popularity-based underlying process, adding to psychological mechanisms driving the impact of major ideology-related events on consumers' preference for different brands. This work also complements the literature on branding and brand personality (Aaker 1997; Shepherd et al. 2020) by showing that exciting brands are closely associated with liberal political ideology. As such, the results emphasize a previously undocumented interaction between electoral successes and failures, and a brand's personality, which jointly drive consumers' preferences for brands. From a practical perspective, this research provides guidance on how to manage exciting brands during politically charged times. Because this work examines the impact of societal events, the findings are scalable and can inform marketing decisions that target consumers of all political leanings.

Overall, this thesis strives to extend the current body of knowledge on the macro-level factors that can drive consumers' brand preferences. The macro-level factors may seem to not be connected to branding in an apparent way. However, this work suggests that such large-scale pressures can exert important influence on consumers' preferences for brands. This work also reveals the psychological processes underlying changes in brand preference. These insights are both theoretically meaningful and practically consequential. The last few decades have been marked by an increasing pressure of macro-level factors that are largely reshaping the marketplace and consumer behavior. As such, marketers may seek guidance on recognizing, adapting to, and taking advantage of these novel challenges. Hopefully, the findings presented in this thesis will assist practitioners in understanding how to approach brand management in this new environment.

CONCLUSIÓN

Esta tesis adoptó una macro perspectiva para el estudio de las preferencias de marca e investigó cómo los factores importantes a gran escala pueden afectar a las marcas. Investigaciones anteriores han descubierto muchas características importantes relacionadas con la marca y el consumidor, que pueden influir en la preferencia de marca. Sin embargo, se sabe menos sobre el impacto de los macro factores en las preferencias por las marcas. En esta tesis, me centro en la influencia de tres importantes macro factores: nuevas tecnologías, amenazas mortales y eventos sociopolíticos, y los mecanismos psicológicos que subyacen a su influencia.

El Capítulo 1 exploró cómo se configuran las preferencias de marca en el contexto del crowdfunding: una forma cada vez más frecuente de financiar el desarrollo de nuevos productos. Propuse que los nombres no semánticos (palabras que no evocan un significado específico) pueden estimular la curiosidad de los consumidores por un nuevo producto más que los nombres semánticos (palabras que evocan un significado específico). Debido a que los consumidores a menudo están motivados por la curiosidad en las plataformas de crowdfunding (Chan et al. 2019; Herrero et al. 2019), sostuve que los nombres no semánticos pueden afectar los resultados del crowdfunding de manera positiva. Probé esta teorización en tres estudios. Para garantizar la solidez y la generalización de los hallazgos, utilicé diferentes metodologías empíricas, conjuntos de datos de laboratorio y de campo, y varios nombres de las marcas.

Los resultados del Capítulo 1 aportan a la literatura de marketing al investigar los efectos del nombre de la marca en el contexto del crowdfunding. Los nuevos productos (Brexendorf et al. 2015; Klink y Athaide 2010) y el crowdfunding (Simpson et al. 2020; Rose et al. 2020) difieren sustancialmente del contexto de marketing tradicional. Como tal, el manual de estrategias de marketing tradicional puede no ser siempre aplicable a estos contextos novedosos. De hecho, a diferencia de la recomendación de marketing común, mis hallazgos muestran que los nombres semánticos pueden ser desventajosas en las plataformas de crowdfunding. Los resultados también complementan la investigación sobre el desarrollo de nuevos productos y el crowdfunding (Simpson et al.2020; Zhang y Chen 2019) al ofrecer un marco basado en la curiosidad para comprender el proceso de toma de decisiones de los consumidores del contexto crowdfunding. Esta investigación también ofrece recomendaciones prácticas y rentables que los especialistas en marketing pueden seguir para crear campañas de

crowdfunding más viables, promocionar sus nuevos productos con más éxito y, estimular la curiosidad de los consumidores con más fuerza.

El Capítulo 2 exploró cómo las preferencias de marca se ven influenciadas por eventos mortales, como ataques terroristas o pandemias mortales. Basándome en investigaciones previas, sostuve que saliente mortalidad puede hacer que los consumidores eviten cambios en el consumo. Debido a que las marcas con personalidad emocionante (y no otras) están más estrechamente asociadas con la noción de cambio, los consumidores tienden a preferir menos las marcas emocionantes cuando la mortalidad es saliente. Probé esta teorización en cuatro estudios que utilizaron diferentes metodologías, conjuntos de datos de campo y laboratorio, y diferentes operacionalizaciones de la mortalidad saliente y la personalidad de la marca.

Los hallazgos del Capítulo 2 complementan la literatura de marketing y ofrecen conocimientos de gestión procesables. Esta investigación identificó un efecto perjudicial previamente indocumentado de la mortalidad saliente en las marcas con personalidad emocionante (y no otras), lo que aporta al creciente trabajo sobre cómo la saliente mortalidad afecta el marketing (Dunn et al.2020; Ferraro et al.2005; Huang et al.2018). Los hallazgos también mostraron que este efecto se manifiesta a nivel de asociaciones conceptuales entre la personalidad de una marca y la noción de cambio. Esto sugiere una nueva implicación teórica de que los consumidores pueden evitar, incluso la idea de cambio, bajo la saliente mortalidad. Los resultados del Capítulo 2 también aportan a la literatura sobre la marca y las personalidades de la marca (Aaker 1997; Aaker et al. 2004), al demostrar que una variable contextual predominante, la amenaza existencial, puede interactuar con la personalidad de la marca para influir en las preferencias de las marcas. Este es un hallazgo importante porque los trabajos anteriores tendían a centrarse en cómo las diferentes personalidades de la marca interactúan con las características de la marca (Brasel y Hagtvedt 2016; Labrecque y Milne 2012; Wentzel 2009) o las características del consumidor (Chun y Davies 2006; Malär et al. 2011; Swaminathan et al.2009). Se sabe menos sobre la interacción entre las personalidades de la marca y las variables contextuales, como los eventos que inducen la mortalidad saliente. Por lo tanto, esta investigación ayuda a llenar este vacío en la literatura sobre la personalidad de la marca. Finalmente, los hallazgos ofrecen importantes implicaciones prácticas al resaltar los efectos adversos de los eventos que aumentan la saliente mortalidad en las preferencias por marcas emocionantes e identificar un medio a través del cual los especialistas en marketing pueden superar este efecto negativo: reduciendo la asociación entre marcas emocionantes y la noción de cambio.

El Capítulo 3 exploró cómo las preferencias por las marcas pueden verse afectadas por eventos sociopolíticos importantes, como las elecciones presidenciales. Propuse que las marcas con personalidad emocionante (y no otras) están estrechamente asociadas con la ideología liberal. Debido a esta asociación, el éxito electoral de un candidato liberal tiende a aumentar las preferencias por marcas con una personalidad emocionante. Un fracaso electoral tiene los efectos opuestos. Los cambios en la popularidad percibida de las marcas emocionantes subyacen a este fenómeno. Probé esta teorización en cinco estudios que emplearon diferentes metodologías, conjuntos de datos de laboratorio y de campo, y diferentes operacionalizaciones de la personalidad de la marca.

Los hallazgos del Capítulo 3 amplían la literatura de marketing de manera importante. Esta investigación complementa la literatura sobre cómo la ideología política impacta el consumo (Chan e Ilicic 2019; Khan et al. 2013; Ordabayeva y Fernandes 2018) al demostrar que los eventos sociopolíticos (las elecciones presidenciales) pueden influir en las marcas. Esto es importante pues los trabajos anteriores se centraron en las características del consumidor a nivel individual (la identificación como liberal o conservador). Por el contrario, esta investigación destaca el impacto de los eventos a nivel social. Además, los hallazgos revelan un proceso subyacente basado en la popularidad, que aporta a los mecanismos psicológicos que impulsan el impacto de los eventos relacionados con la ideología en la preferencia por diferentes marcas. Esta investigación también complementa la literatura sobre la marca y la personalidad de la marca (Aaker 1997; Shepherd et al. 2020) al mostrar que las marcas emocionantes están estrechamente asociadas con la ideología liberal. Como tal, los resultados enfatizan una interacción previamente indocumentada entre los éxitos y fracasos electorales y la personalidad de una marca, que en conjunto impulsan las preferencias de los consumidores. Desde una perspectiva práctica, esta investigación proporciona una guía sobre cómo administrar marcas emocionantes durante tiempos políticamente cargados. Debido a que este trabajo examina el impacto de los eventos sociales, los hallazgos son escalables y pueden informar las decisiones de marketing que se dirigen a los consumidores de todas las inclinaciones políticas.

En general, esta tesis aspira ampliar el cuerpo actual de conocimientos sobre los macro factores que pueden impulsar las preferencias de marca. Los macro factores pueden parecer no estar conectados con la marca de una manera aparente; sin embargo, este tesis sugiere que estas presiones a gran escala pueden ejercer una importante influencia en las preferencias por las marcas. Esta investigación también revela los procesos psicológicos que subyacen a los cambios en la preferencia de marca. Estas ideas son teóricamente significativas y consecuentes

a nivel práctico. Las últimas décadas han estado marcadas por una creciente presión de macro factores que están remodelando el mercado y el comportamiento del consumidor. Como tal, los especialistas en marketing buscar orientación para reconocer, adaptar y aprovechar estos nuevos desafíos. Con suerte, los hallazgos presentados en esta tesis ayudarán a los profesionales a comprender cómo abordar la gestión de marca en este nuevo entorno.

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Appendix A. Additional Materials for Chapter 1

Table A1. Example of the Coding Scheme Used in Study 1

Title of a crowdfunding campaign	Code
CHEARS ONE - Smart Hearing Assistant	0
Deeno-saur The World's BEST Toothbrush for Kids	0
Goodnight Lad: Augmented Reality Children's Book	0
Kortex Xtend Lite Smallest battery-powered WiFi repeater	0
Marvelous Machines: Augmented Reality Children's Book	0
Open Architecture: An app that gives a damn.	0
PolyPure - Waterless Hand Cleaner	0
SEER: The First AR Helmet that Makes You A Real Iron Man	0
The Lamp: modern desk accessory that works with all devices	0
Write2Go - A New Way to Chat, Sign, and Take Notes.	0
Aequus Customizable Planar Magnetic Headphones	1
BozGo, 24/7 Health Tracking Smartwatch with Live 3D UI	1
CHUWI UBook - Goes anywhere - Does everything	1
Gululu the interactive bottle that keeps kids hydrated	1
Mogees - Play the World	1
Mugo: All-in-One Volume Touch Control Wireless Earbuds	1
nomi: Social Emotive Companion	1
BOPEL - One layer water repellent for fabrics/tiles/leather	1
VOLARE- FINALLY..GET FIRST-CLASS COMFORT & SLEEP IN COACH!	1
WAKAWAKA solar LED lamp with a story	1
Mobile Solar Power Core	.
Coastal Pollution Mapper	.
Travel to The Moon in Real Size Spaceships.	.
Retractable Scalpel Pocket Knife	.
World's 1st Dual Driver Wireless Noise Cancelling Headphones	.

Notes. Codes are: "1" = Non-semantic name of a new product;
 "0" = Semantic name of a new product;
 "." = Name of a new product not specified.

Bolded are new product names that were coded.

Table A2. Additional Analysis: The Effect of Non-Semantic New Product Names is Greater for Campaign Descriptions with More (Vs. Less) Certainty

	β	SE
Non-semantic name	.131***	.032
Certainty	.012	.011
Non-semantic name \times Certainty	.029†	.015
Funds requested	.001**	.001
Backers	.001***	.001
Staff pick	.940***	.04
Video	1.45***	.193
Duration	.019***	.002
Country effects		Yes
Sub-category fixed effects		Yes
Within-R ²	.365	
Between-R ²	.778	
Overall R ²	.386	
n observations	4,447	


Notes. The bolded variable is our variable of interest. Estimates for the effects of country are available on request from the authors. Certainty is a LIWC variable (Fisch and Block, 2020; Parhankangas and Renko, 2017).

† $p < .10$; * $p < .05$; ** $p < .01$; *** $p < .001$.

Table A3. Measurement Instruments in Study 2b

Measure	Items	Scale	Source	
<i>Curiosity</i>	How curious do you feel about this start-up campaign?	7-point Likert scale: 1 = Not at all; 7 = Very much	Menon and Soman (2002)	
	How interested would you be in reading more about this start-up campaign?			
	How involved did you feel when reading the information about this start-up campaign?			
	How interested would you be in checking out the prototype?			
<i>Persuasion</i>	How much do you think you were persuaded by this crowdfunding campaign?	7-point Likert scale: 1 = Not at all; 7 = Very much	Frey and Eagley (1993)	
	How much did the crowdfunding campaign attract your attention?			
	How plausible were the arguments made in the crowdfunding campaign?			
<i>Willingness-to-invest</i>	If you were seeking to fund a start-up, how likely would you be to fund this start-up?	7-point semantic differential: 1 = unlikely; 7 = likely	Mahmood et al. (2019)	
	If you were seeking to fund a start-up, how probable is it that you would fund this start-up?			7-point semantic differential: 1 = improbable; 7 = probable
	If you were seeking to fund a start-up, is it possible that you would fund this start-up?			7-point semantic differential: 1 = impossible; 7 = possible

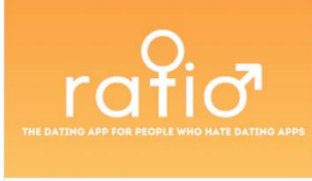
Platform: Kickstarter



Evlōno One
LEGO® compatibility on the front-end, Arduino compatibility on the back-end, open source...
by Tyler Collins

\$6,513 pledged
9% funded
14 days to go


DIY Electronics | Emmaus, PA



Ratio: Know where the singles are
A dating app that shows single female/male ratios of bars and allows you to browse and interact with othe...
by Chad

\$1 pledged
0% funded
21 days to go

Apps | San Diego, CA




Elros: P2P Social Publishing Protocol
A content distribution protocol that implements ownership of distribution.
by Yama Otoyamoto

\$1,816 pledged
3% funded
11 days to go

Software | New York, NY

Platform: Indiegogo




FUNDING

OYO NOVA Gym
FULL GYM IN YOUR HANDS:
Transform Your Body at Home, Office, and On the Go.

HEALTH & FITNESS
\$5,676,182 USD raised 14,704%

Now funding through InDemand




Over 200% Funded in 15 Minutes

FUNDING

Reevo : The Hubless E-Bike
Style, security & safety for the modern urban cyclist.

TRANSPORTATION
\$1,324,906 USD raised 2,650%

12 hours left



FUNDING

Stairslide - Indoor Slide for Stairs
The safer, more durable, non-permanent slide for indoor stairs.


TECH & INNOVATION
\$201,532 USD raised 1,500%

Now funding through InDemand


Platform: Fundable



Echo Ridge
Accurate opportunity and risk prediction in the financial services sector
Concord, NH



Phyteau
New class of therapeutics for diabetes, obesity, prediabetes & weight los...
Santa Fe, NM



ivee
Apple CarPlay for Ride-hailing Vehicles
Chicago, IL

Figure A1. The Names of New Products are Prominent on Reward-Based Crowdfunding Platforms: Examples Across Different Reward-Based Crowdfunding Platforms

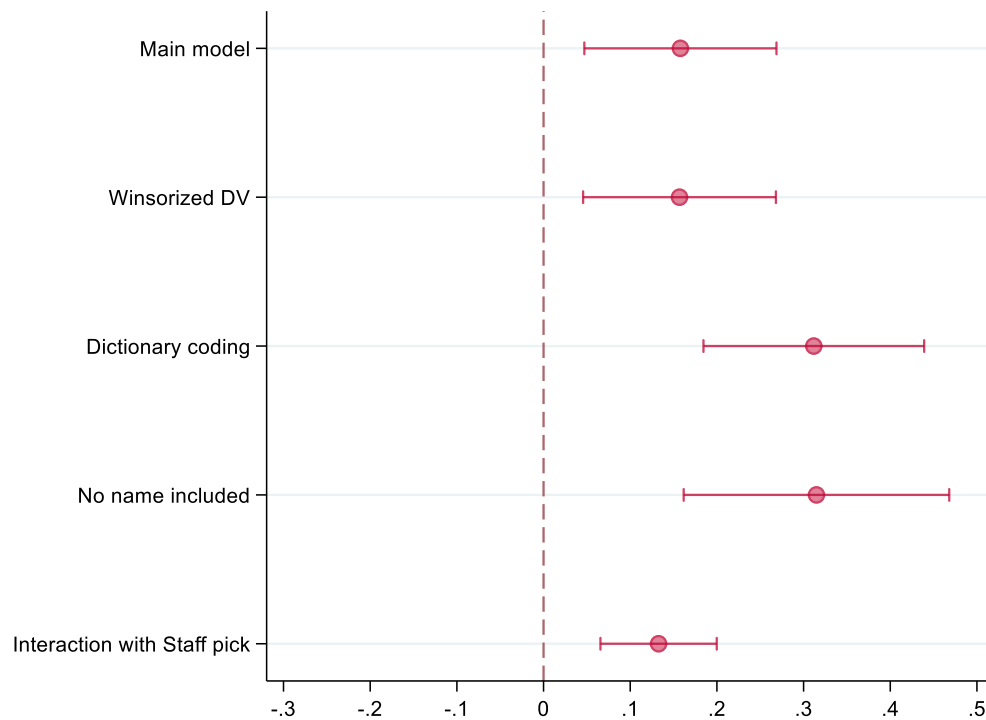


Figure A2. Summary of the Main Results and Robustness Checks of Study 1: The Effect of *Non-Semantic Name* on *Funds Collected* (Linear Predictions)

Notes. The y-axis presents the categorical description of the models I estimated. The x-axis presents the point estimate with 95% confidence intervals for the effect of the independent variable *Non-semantic name* on the dependent variable *Funds collected*.

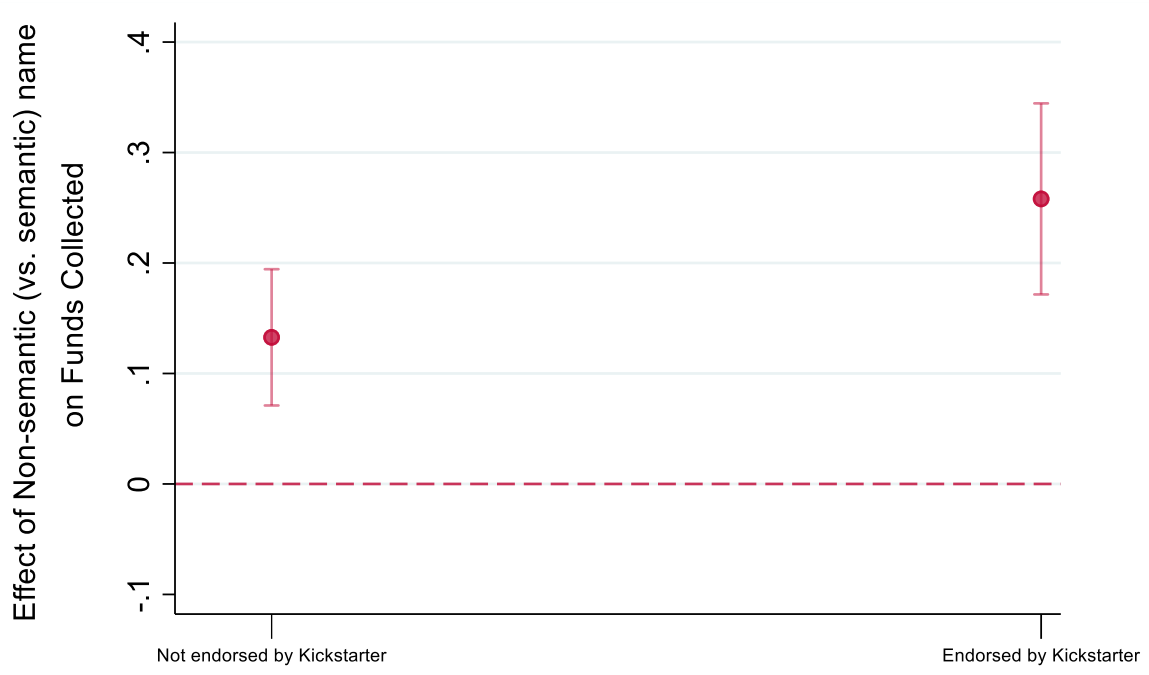


Figure A3. The Effect of *Non-Semantic* (Vs. *Semantic*) Name on *Funds Collected* is Larger for Crowdfunding Campaigns Endorsed by Kickstarter






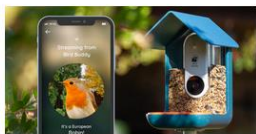

Stimuli used in Study 2a	Example of the “Recommended for you” section from Kickstarter
<p>RECOMMENDED</p> <div data-bbox="376 363 1070 491">  <p>NEBIA – A breakthrough alarm clock 0% funded By Nebia</p> </div> <hr/> <div data-bbox="376 512 1070 639">  <p>CHANCE – A breakthrough alarm clock 0% funded By Chance</p> </div> <hr/> <div data-bbox="376 660 1070 788">  <p>ORBI – A breakthrough alarm clock 0% funded By Orbi</p> </div> <hr/> <div data-bbox="376 809 1070 936">  <p>SOVEREIGN – A breakthrough alarm clock 0% funded By Sovereign</p> </div> <p style="text-align: right;">< <u>1</u> 2 3 ></p>	<p>RECOMMENDED FOR YOU</p> <div data-bbox="1137 373 1854 507">  <p>FLECTR 360 Visibility all around for your nig... 2,715% funded By The Outsider Team</p> </div> <hr/> <div data-bbox="1137 555 1854 689">  <p>Bird Buddy: A Smart Bird Feeder 7,137% funded By Bird Buddy</p> </div> <hr/> <div data-bbox="1137 737 1854 871">  <p>Revopoint POP: Precise 3D Scanner for 3D... 20,279% funded By Revopoint 3D</p> </div> <p style="text-align: right;">< <u>1</u> 2 3 ></p>

Figure A4. Study 2a: Example of Stimuli

Notes. The left panel shows the stimuli used in Study 2a. The right panel shows a section of the Kickstarter webpage after which I modeled the stimuli.



<p style="text-align: center;">Panel A</p> <p style="text-align: center;">Campaign preview presented at the first stage of the experiment</p>	<p style="text-align: center;">Panel B</p> <p style="text-align: center;">Full campaign information presented at the second stage of the experiment</p>
<div style="text-align: center; font-size: 48px; font-weight: bold; margin-bottom: 20px;">ORBI</div> <p>Orbi: A new way of taking notes!</p> <p>Orbi will change the way you think about notebooks. Orbi is an innovative reusable paper notebook that...</p> <p>by Orbi</p> <hr style="width: 25%; margin-left: 0;"/> <p>\$6850 pledged 50% funded 15 days to go</p> <p>Technology</p>	<div style="text-align: center; font-size: 24px; font-weight: bold; margin-bottom: 10px;">The Orbi Notebook</div> <div style="display: flex; justify-content: space-between; align-items: center;"> <div style="text-align: center;"> <p>Orbi</p>  </div> <div style="text-align: center;"> <p>Meet the Orbi, a smart paper-and-pen notebook that's reusable.</p> <p style="background-color: #4a7ebb; color: white; padding: 5px 10px; border-radius: 5px;">Get the Orbi</p> <p><small>Created by</small> Orbi</p> </div> </div> <div style="margin-top: 10px;"> <p>About</p>  </div> <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <div style="width: 60%;"> <p>The Orbi Notebook</p> <p>Technology</p> <p>The Orbi notebook provides a classic pen and paper experience, yet is built for the digital age. Although it feels like a traditional notebook, the Orbi is endlessly reusable and connected to all of your favorite cloud services.</p> <p>Your writing sticks to Orbi pages like regular paper. But add a drop of water... and the notebook erases like magic.</p> <p>The Orbi notebook is compatible with the Orbi app. That means before your notes go off the page they go online to destinations like Google Drive, Dropbox, and Evernote — perfectly organized.</p> </div> <div style="width: 35%; text-align: center; border-left: 1px solid #ccc; padding-left: 10px;"> <p>\$6,850 <small>pledged of \$13,700 goal</small></p> </div> </div>

Figure A5. Study 2b: Example of Stimuli for the Non-Semantic Name Condition

Notes. The stimuli for the semantic name condition were identical with one exception: The new product name was “Sovereign.”

Appendix B. Additional Materials for Chapter 2

Pilot Study: Are Brands with an Exciting (But Not Other) Personality Closely Associated with the Notion of Change?

This pilot study tested whether brands with an exciting (but not other) personality are closely associated with the notion of change.

Design and Procedure

Fifty-three U.S. consumers ($M_{\text{age}} = 33$ years; 45% women) recruited from a consumer panel participated in the study. Each participant saw short brand descriptions containing traits of all five brand personalities, which were presented one brand description at a time (15 descriptions in total, corresponding to brand personality traits that “most reliably, accurately, and comprehensively represent the five dimensions” of brand personality; see Aaker 1997, p. 351). The traits for an exciting personality included “daring,” “spirited,” “imaginative,” and “up-to-date;” the traits for a sincere personality included “down-to-earth,” “honest,” “wholesome,” and “cheerful;” the traits for a competent personality included “reliable,” “intelligent,” and “successful;” the traits for a sophisticated personality included “upper class” and “charming;” and the traits for a rugged personality included “outdoorsy” and “tough.” For each brand description, participants rated the extent to which they perceived the brand to be changing constantly (1 = “To a very small extent,” and 7 = “To a very large extent”). I averaged responses for traits related to each brand personality for subsequent analyses (α 's > .66).

Results

A series of one-sample t-tests against the mid-point of the scale (4) showed that only the exciting brand personality was rated significantly higher than the mid-point of the change-association measure, suggesting a strong association with the notion of change ($M = 5.44$, $SD = .84$; $t(52) = 12.52$, $p < .001$, Cohen's $d = 1.72$). The tests on the sincere ($M = 3.70$, $SD = 1.32$; $p = .10$), competent ($M = 4.09$, $SD = 1.23$; $p = .61$), sophisticated ($M = 3.99$, $SD = 1.40$; $p = .96$), and rugged ($M = 3.94$, $SD = 1.30$; $p = .75$) personalities did not yield any significant

differences. Additionally, a series of paired-samples t-tests showed that participants evaluated descriptions related to the exciting brand personality as more closely associated with the notion of change, compared to the descriptions related to the sincere ($t(52) = 7.92, p < .001$, Cohen's $d = 1.09$), competent ($t(52) = 6.75, p < .001$, Cohen's $d = .93$), sophisticated ($t(52) = 6.22, p < .001$, Cohen's $d = .86$), or rugged ($t(52) = 6.97, p < .001$, Cohen's $d = .96$) personalities. These results thus showed that brands with the exciting personality, unlike brands with other personalities, tend to be closely associated with the notion of change.

Table B1. Study 1: Robustness Test Using the Balanced Panel Dataset

	DV: Log(CBBE)	
	β	<i>SE</i>
<i>Exciting</i>	.087***	.006
<i>MS</i>	.057**	.028
<i>Exciting</i> × <i>MS</i>	-.008**	.003
<i>Sincere</i>	.028***	.004
<i>Competent</i>	.087***	.006
<i>Sophisticated</i>	.031***	.005
<i>Rugged</i>	.017***	.004
Brand awareness	.001***	.0001
Brand usage	.022***	.002
Product and service category fixed effects		Yes
Within-R ²	.832	
n observations	8,276	

Notes: DV = Dependent variable. Fixed effects regression with robust standard errors clustered by product and service category.

The focal variable of interest and its statistically significant coefficient estimate (i.e., DD estimate) are highlighted in boldface.

*** $p < .001$, ** $p < .05$

Table B2. Study 1: Robustness Test with Winsorized Variables

	Log (CBBE) winsorized at 1st and 99th percentile		Exciting winsorized at 1st and 99th percentile	
	DV: Log (CBBE)		DV: Log (CBBE)	
	β	SE	β	SE
<i>Exciting</i>	.080***	.006	.088***	.006
<i>MS</i>	.084*	.045	.091**	.037
<i>Exciting</i> × <i>MS</i>	-.009**	.004	-.009**	.003
<i>Sincere</i>	.029***	.004	.030***	.004
<i>Competent</i>	.092***	.008	.094***	.008
<i>Sophisticated</i>	.029***	.005	.029***	.005
<i>Rugged</i>	.014***	.004	.014***	.004
Brand awareness	.001***	.0001	.001***	.0001
Brand usage	.023***	.002	.023***	.002
Balanced	.115**	.049	.118**	.049
Product and service category fixed effects		Yes		Yes
Within-R ²	.815		.818	
n observations	11,711		11,711	

Notes: DV = Dependent variable. Fixed effects regression with robust standard errors clustered by product and service category.

The focal variable of interest and its statistically significant coefficient estimate (i.e., DD estimate) are highlighted in boldface.

*** $p < .001$, ** $p < .05$, * $p < .10$

Table B3. Study 1: Robustness Test with the “Fake” Event Regression Using a Different BAV Dataset for Q1 2002-Q2 2003

	DV: Log(CBBE)	
	β	<i>SE</i>
<i>Exciting</i>	.071***	.006
<i>Fake event</i>	-.108**	.034
<i>Exciting</i> × <i>Fake event</i>	.012**	.004
<i>Sincere</i>	.033***	.005
<i>Competent</i>	.093***	.005
<i>Sophisticated</i>	.028***	.005
<i>Rugged</i>	.013**	.004
Brand awareness	.001***	.0001
Brand usage	.023***	.002
Balanced	.103**	.037
Product and service category fixed effects		Yes
Within-R ²	.826	
n observations	11,611	

Notes: DV = Dependent variable. Fixed effects regression with robust standard errors clustered by product and service category.

The focal variable of interest and the coefficient estimate are highlighted in boldface.

*** $p < .001$, ** $p < .05$

Study 2: MS Induction

MS condition	Control condition
In the space provided below, please briefly describe the emotions that the thought of your own death arouses in you.	In the space provided below, please briefly describe the emotions that the thought of watching television arouses in you.
In the space provided below, please jot down, as specifically as you can, what you think will happen to you as you die and once you are physically dead.	In the space provided below, please jot down, as specifically as you can, what you think will happen to you as you watch television and once you have physically watched television.

Notes: Manipulation adopted from prior research (Florian et al. 2002).

Study 2: Brand Personality Stimuli

Exciting Brand	Sincere Brand
The ε apparel curated for cool and imaginative people	The ε apparel curated for friends and families
Get thrilled about the ε apparel brand! The ε apparel brand gives you a cool, daring and unique style. The ε apparel brand was established by a group of enthusiastic and imaginative people. Because they value energy and vigor, they created a brand that is exciting, inspiring, and bursting with energy. This is why the ε apparel’s customers like the brand so much – It is pure excitement!	Get a hometown feeling with the ε apparel brand! The ε apparel brand gives you a real, small-town and genuine style. The ε apparel brand was established by a close group of friends. Because they value sincerity and simple life, they created a brand that is family-oriented, honest, and a little sentimental. This is why the ε apparel’s customers like the brand so much – It is pure candor!
ε apparel. Wear excitement.	ε apparel. Wear genuine.

Notes: I chose a sincere brand personality for the control condition, because exciting and sincere personalities are the two most prevalent personalities in the marketplace (Sundar and Noseworthy 2016) and this pair of personalities has been used extensively in prior brand personality research (Aaker et al. 2004; Luffarelli et al. 2019).

Study 2: Pretest

Following prior research (Luffarelli et al. 2019), I used brand descriptions to manipulate brand personality. To confirm that the two descriptions above successfully conveyed the respective brand personality, I conducted a pretest with consumers recruited from the same population as the main study. One hundred and thirty-one U.S. consumers ($M_{\text{age}} = 35$ years; 56% women) from a consumer panel were randomly assigned to one of the two conditions (exciting vs. sincere brand personality). Participants read their assigned brand description and then indicated the extent to which the brand was exciting, sincere, competent, sophisticated, and rugged (1 = “Not at all,” and 7 = “Very much so”), how much they liked the brand (1 = “Do not like it at all,” and 7 = “Like it very much”), and the extent to which the brand was of good quality (1 = “Much lower quality than average,” and 7 = “Much higher quality than average”).

A series of paired samples t-tests confirmed that the exciting version of the target brand description was perceived as significantly more exciting ($M_{\text{exciting}} = 5.63$, $SD_{\text{exciting}} = 1.39$) than sincere ($M_{\text{sincere}} = 3.88$, $SD_{\text{sincere}} = 2.12$; $t(64) = 6.47$, $p < .001$, Cohen’s $d = .80$), competent ($M_{\text{competent}} = 4.68$, $SD_{\text{competent}} = 1.44$; $t(64) = 4.76$, $p < .001$, Cohen’s $d = .59$), sophisticated ($M_{\text{sophisticated}} = 4.05$, $SD_{\text{sophisticated}} = 1.72$; $t(64) = 6.71$, $p < .001$, Cohen’s $d = .83$), or rugged ($M_{\text{rugged}} = 3.37$, $SD_{\text{rugged}} = 1.71$; $t(64) = 8.74$, $p < .001$, Cohen’s $d = 1.08$). In addition, the sincere version of the description was perceived as significantly more sincere ($M_{\text{sincere}} = 5.68$, $SD_{\text{sincere}} = 1.69$) than exciting ($M_{\text{exciting}} = 4.21$, $SD_{\text{exciting}} = 1.84$; $t(65) = 6.98$, $p < .001$, Cohen’s $d = .86$), competent ($M_{\text{competent}} = 4.65$, $SD_{\text{competent}} = 1.57$; $t(65) = 5.92$, $p < .001$, Cohen’s $d = .73$), sophisticated ($M_{\text{sophisticated}} = 3.89$, $SD_{\text{sophisticated}} = 1.74$; $t(65) = 7.42$, $p < .001$, Cohen’s $d = .91$), or rugged ($M_{\text{rugged}} = 3.05$, $SD_{\text{rugged}} = 1.66$; $t(65) = 10.72$, $p < .001$, Cohen’s $d = 1.32$). Moreover, two independent samples t-tests confirmed that the exciting version of the description was perceived as more exciting ($M_{\text{exciting}} = 5.63$, $SD_{\text{exciting}} = 1.39$) than the sincere version of the description ($M_{\text{sincere}} = 4.21$, $SD_{\text{sincere}} = 1.84$; $t(129) = 4.97$, $p < .001$, Cohen’s $d = .87$). The sincere version of the description was also perceived as more sincere ($M_{\text{sincere}} = 5.68$, $SD_{\text{sincere}} = 1.69$) than the exciting version of the description ($M_{\text{exciting}} = 3.88$, $SD_{\text{exciting}} = 2.12$; $t(129) = 5.39$, $p < .001$, Cohen’s $d = .94$).

Finally, the two descriptions did not differ in brand likability ($M_{\text{exciting}} = 4.43$, $SD_{\text{exciting}} = 1.63$ vs. $M_{\text{sincere}} = 4.62$, $SD_{\text{sincere}} = 1.73$; $t(129) = -.65$, $p = .52$) or quality ($M_{\text{exciting}} = 4.71$, $SD_{\text{exciting}} = 1.28$ vs. $M_{\text{sincere}} = 4.74$, $SD_{\text{sincere}} = 1.52$; $t(129) = -.14$, $p = .89$).

Study 2: Additional Analyses with Participants' Age, PANAS, and Arousal

Because research has shown that a person's age might moderate the effects of MS (Chopik 2017), in this and all the other studies I conducted additional analysis to control for the effect of participants' age. Specifically, I repeated the analysis in Study 2, including participants' age as a covariate. There was no significant effect of participants' age on the dependent measure ($p = .157$) and including participants' age as a covariate did not change significant pattern of the results.

I conducted further analysis to test whether experimental manipulation of MS affected the filler measures of PANAS (i.e., positive and negative affect) and arousal, and thus potentially impacted the results. There were no significant effects of the MS manipulation on positive affect ($\alpha = .92$; $p = .26$) or arousal ($p = .30$). There was a significant effect of the MS manipulation on negative affect ($\alpha = .94$; $t(313) = 3.10$, $p = .002$), such that participants in the MS condition reported more negative affect ($M = 1.69$, $SD = .84$) than those in the control condition ($M = 1.43$, $SD = .61$). However, and importantly, including these variables as covariates into the analyses did not affect the significant patterns of results in Study 2.

Study 3: MS Induction

Please think about everything you heard and know about COVID-19 – a deadly new virus, that is currently killing people across the world. According to the authorities, COVID-19 has killed more than 1,000 people and infected more than 43,000 people. The virus spreads very quickly and there is still no treatment or vaccine for it.

Please think about what happens if you are infected with the coronavirus. How might you become infected? How would you feel if you are infected with this deadly virus?

Notes: The statistic used for this manipulation was from February 20th, 2020, around the time the study was conducted. The experimental procedure was approved by IRB (#20-2019-2020) at the university where the study was conducted.

I carefully reviewed participants' responses to confirm that this manipulation induced death-related thoughts (as opposed to thoughts related to other concepts, e.g., social exclusion or vaccination). Indeed, participants primarily reflected on how coronavirus can fatally affect them: "I would feel really miserable if I would have been infected with it and it would feel like

end of the world to me thinking about the fact that I have only few days left to live;” “If I were to be infected with this virus, I would feel sad and as if my life has come to an end due to the rising deaths this virus is causing;” “It is a scary thought imagining getting a deadly virus that does not have an existing cure;” “I would feel mentally devastated if I were to become infected with this virus, as the possibility of death is high if not treated properly.”

Study 3: Brand Personality Stimuli

Setia apparel

curated for cool and imaginative people

Get thrilled about the Setia apparel brand! The Setia apparel brand gives you a cool, daring and unique style. The Setia apparel brand was established by a group of enthusiastic and imaginative people. Because they value energy and vigor, they created a brand that is exciting, inspiring, and bursting with energy. This is why Setia’s customers like the brand so much – It is pure excitement!

Setia apparel. Wear excitement.

Notes: The only difference in descriptions used in Study 2 and Study 3 was the brand name. I used the Greek letter ε as the brand name in Study 2 and changed it to “Setia” in Study 3.

Study 3: Additional Analyses with Participants’ Age, Arousal and Stress

I conducted additional analysis to control for the potential effect of participants’ age that could influence the results. I repeated the analysis in Study 3, including participants’ age as a covariate. There was no significant effect of participants’ age on the dependent measure ($p = .743$) and including participants’ age as a covariate did not change significant pattern of the results.

I conducted further analysis to test whether experimental manipulation of MS affected the filler measures of stress and arousal, and thus potentially impacted the results. There were no significant effects of MS manipulation on stress ($p = .44$) or arousal ($p = .07$). Importantly, including these variables into the analyses as covariates did not alter the significant patterns of the results in Study 3.

Study 4: MS Induction

MS condition	Control condition
Please take a few moments to think about your own death.	Please take a few moments to think about watching TV on an ordinary occasion.
In the space provided below, please write a short paragraph about:	In the space provided below, please write a short paragraph about:
(a) How do you feel when you think about your own death, and	(a) How do you feel when you think about watching TV on an ordinary occasion, and
(b) What would happen to you when you are physically dead.	(b) What would happen to you as you watch TV.

Notes: Manipulation adopted from prior research (Florian et al. 2002).

Study 4: Brand Personality Stimuli

Strong association with the notion of change condition	Weak association with the notion of change condition
Be up to date with the Independent Internet Services. Get connected in a flash!	Be always up to date with the Independent Internet Services. Stay connected forever!

Study 4: Pretest

To confirm that the two versions of the tagline successfully manipulated the strength of association between the exciting brand personality and the notion of change, I conducted a pretest with consumers recruited from the same population as the main study. One hundred U.S. consumers ($M_{\text{age}} = 33$ years; 50% women) from a consumer panel were randomly assigned to one of the two conditions (strong vs. weak association with the notion of change). Participants read their assigned tagline and then indicated the extent to which the tagline was connected to the notion of change (1 = “Not at all,” and 7 = “Very much”) and projected that the brand makes things stay the way they are (1 = “Not at all,” and 7 = “Very much”). In

addition, participants rated the extent to which the brand advertised in the tagline was exciting (1 = “Not at all exciting,” and 7 = “Very exciting”), how much they liked the brand (1 = “Dislike,” and 7 = “Like”), how likely they would be to purchase the brand (1 = “Very unlikely,” and 7 = “Very likely”), and the probable quality of the brand (1 = “Extremely low,” and 7 = “Extremely high”).

An independent samples t-test confirmed that participants perceived the version of the tagline that projected weak association with the notion of change to be less connected to the notion of change ($M_{\text{weak}} = 3.04$, $SD_{\text{weak}} = 1.94$) than the version of the tagline that projected strong association with the notion of change ($M_{\text{strong}} = 3.74$, $SD_{\text{strong}} = 1.54$; $t(98) = -2.00$, $p = .048$, Cohen’s $d = .40$). In addition, the version of the tagline that projected weak association with the notion of change was rated as projecting more that the advertised brand makes things stay the way they are ($M_{\text{weak}} = 4.60$, $SD_{\text{weak}} = 2.03$) than the version of the tagline that projected strong association with the notion of change ($M_{\text{strong}} = 3.36$, $SD_{\text{strong}} = 1.41$; $t(98) = 3.55$, $p = .001$, Cohen’s $d = .71$).

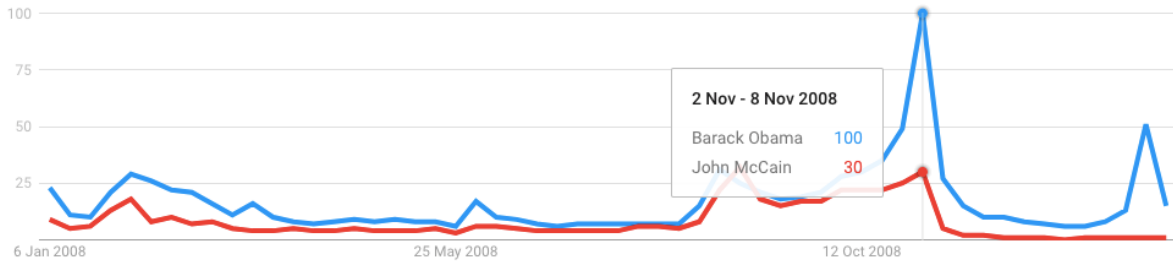
Lastly, the two taglines did not differ in perceptions of brand personality of excitement ($M_{\text{strong}} = 4.28$, $SD_{\text{strong}} = 2.03$ vs. $M_{\text{weak}} = 3.96$, $SD_{\text{weak}} = 1.98$; $t(98) = .80$, $p = .43$), brand likability ($M_{\text{strong}} = 4.90$, $SD_{\text{strong}} = 1.18$ vs. $M_{\text{weak}} = 4.62$, $SD_{\text{weak}} = 1.32$; $t(98) = 1.12$, $p = .27$), purchase intentions ($M_{\text{strong}} = 4.60$, $SD_{\text{strong}} = 1.53$ vs. $M_{\text{weak}} = 4.30$, $SD_{\text{weak}} = 1.28$; $t(98) = 1.07$, $p = .29$), or quality ($M_{\text{strong}} = 4.66$, $SD_{\text{strong}} = 1.06$ vs. $M_{\text{weak}} = 4.32$, $SD_{\text{weak}} = 1.19$; $t(98) = 1.51$, $p = .13$).

Study 4: Additional Analyses with Participants’ Age

I conducted this analysis to examine whether participants’ age influenced the results. I repeated the analysis in Study 4, including participants’ age as a covariate. There was no significant effect of participants’ age on the dependent measure ($p = .382$) and including participants’ age as a covariate did not change significant pattern of the results in Study 4.

Appendix C. Additional Materials for Chapter 3

Panel A. Interest in the liberal candidate Barack Obama and the conservative candidate John McCain peaked in the 4th quarter of 2008 and decreased in the 1st quarter of 2009.



Panel B. Interest in the liberal candidate John Kerry and the conservative candidate George W. Bush peaked in the 4th quarter of 2004 and decreased in the 1st quarter of 2005.

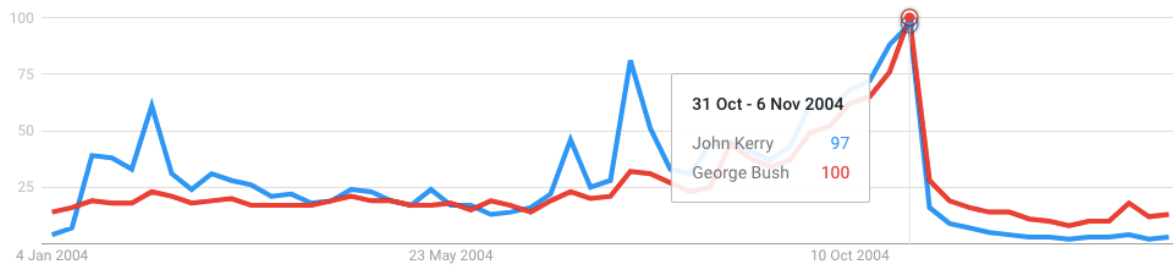


Figure C1. Studies 1a-1b: Consumer interest in presidential candidates peaked in the 4th quarter of the election year, following by a decrease in the 1st quarter of the subsequent year:
Google trends data

Study 2b: Experimental manipulation of electoral success (vs. failure) of the liberal candidate

Electoral success of the liberal candidate	Electoral failure of the liberal candidate
<p>Imagine that you are visiting your friends who live in a different country. This is your first visit - you have never been to this country before.</p>	<p>Imagine that you are visiting your friends who live in a different country. This is your first visit - you have never been to this country before.</p>
<p>You happen to visit on the eve of a presidential election. From what you learned (from newspaper articles, TV broadcasts, and conversations with your friends who live in this country), a liberal candidate is expected to win this year's election. In fact, the liberal candidate has about 30% lead in recent polls. It is thus widely expected that the liberal candidate will win the presidential election by a very large margin.</p>	<p>You happen to visit on the eve of a presidential election. From what you learned (from newspaper articles, TV broadcasts, and conversations with your friends who live in this country), a liberal candidate is expected to lose this year's election. In fact, the liberal candidate is lagging by about 30% in recent polls. It is thus widely expected that the liberal candidate will lose the presidential election by a very large margin.</p>
<p>What political ideology do you think most citizens of this country support? What political issues do you think citizens of this country care about for this election?</p>	<p>What political ideology do you think most citizens of this country support? What political issues do you think citizens of this country care about for this election?</p>

Study 2b: Description of a brand with the exciting personality

You are meeting your friends. Tonight, is the election night, so your friends suggest you grab a drink and watch the presidential election results live in a bar nearby. Like most citizens of this country, your friends believe that liberal candidate is going to win the election.

The bar you are at serves a variety of local craft beers. The brands of these craft beers do not tell you anything. You ask your friends for a recommendation, and they describe the following brand to you.

According to your friends, it is a “one-of-a-kind beer. It has an imaginative, somewhat provoking, but definitely exciting taste.”

Study 3: Description of a brand with the exciting personality

The ϵ apparel
curated for **cool** and **imaginative** people

Get thrilled about the ϵ apparel brand! The ϵ apparel brand gives you a **cool, daring** and **unique** style. The ϵ apparel brand was established by a group of **enthusiastic** and **imaginative** people. Because they value **energy** and **vigor**, they created a brand that is **exciting, inspiring, and bursting with energy**. This is why the ϵ apparel’s customers like the brand so much – It is pure excitement!

E apparel. Wear excitement.

Study 3: Pretest of brand descriptions

Following prior research (Luffarelli et al. 2019), I used a short brand description to convey an exciting brand personality. I pretested this description with consumers recruited from the same population as the main study. Sixty-five U.S. consumers ($M_{\text{age}} = 34$ years; 60% women) from a consumer panel read the brand description and indicated the extent to which the brand in the description was exciting, sincere, competent, sophisticated, and rugged (1 = Not at all, and 7 = Very much so).

A series of paired samples t-tests confirmed that the brand description was perceived as significantly more exciting ($M_{\text{exciting}} = 5.63$, $SD_{\text{exciting}} = 1.39$) than sincere ($M_{\text{sincere}} = 3.88$, $SD_{\text{sincere}} = 2.12$; $t(64) = 6.47$, $p < .001$, Cohen’s $d = .80$), competent ($M_{\text{competent}} = 4.68$, $SD_{\text{competent}} = 1.44$; $t(64) = 4.76$, $p < .001$, Cohen’s $d = .59$), sophisticated ($M_{\text{sophisticated}} = 4.05$, $SD_{\text{sophisticated}} = 1.72$; $t(64) = 6.71$, $p < .001$, Cohen’s $d = .83$), or rugged ($M_{\text{rugged}} = 3.37$, $SD_{\text{rugged}} = 1.71$; $t(64) = 8.74$, $p < .001$, Cohen’s $d = 1.08$). Thus, the description successfully conveyed a perception of the exciting brand personality.