

When Goliaths Win and Davids Lose: The Moderating Role of Perceived Risk in Brand Biography Effects

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When Goliaths Win and Davids Lose:

The Moderating Role of Perceived Risk in Brand Biography Effects

Abstract

Brand biographies trace a brand's evolution to position it as an underdog (i.e., passion and determination that lead to success despite of limited resources) or a topdog (i.e., success based on abundance of resources) brand. This research examines how consumers' risk perceptions associated with brand choice influence brand biography effects. In two studies, the authors demonstrate that when perceived risk associated with brand choice is low, consumers process brand biographies narratively, and underdog (vs. topdog) brand biographies lead to higher levels of narrative transportation, resulting in more favorable brand evaluations. When perceived risk associated with brand choice is high, however, consumers respond more positively to topdog (vs. underdog) brand biographies, which signal brand's ability to reduce the risk associated with brand choice. Importantly, the topdog effect observed at higher levels of perceived risk reverses when consumers have the opportunity to process the brand biography prior to receiving high risk information, as this allows for narrative transportation into the brand biography. This research contributes to a more nuanced understanding of consumer reactions to brand biographies and suggests that perceived risk should be an important determinant in the marketers' choice of emphasizing the topdog or underdog characteristics of their brand biography.

Keywords: brand biographies, perceived risk, brand narratives, narrative transportation, elaboration, uncertainty, underdog brands

Introduction

Brand biographies are narratives that trace a brand's evolution from its origins to its present, and often depict brands as underdogs or topdogs (Avery, Paharia, Keinan, & Schor, 2010; Paharia, Keinan, Avery, & Schor, 2011). Underdog brand biographies convey how a brand successfully overcame external disadvantages and a lack of resources with passion and determination, whereas topdog brand biographies describe a brand's road to success based on abundance of resources (Paharia et al., 2011). Research provides substantial evidence for an underdog effect—a more favorable consumer evaluation of brands associated with underdog brand biographies (Jun, Sung, Gentry, & McGinnis, 2015; Kao, 2015; Paharia et al., 2011). Complementing recent research on moderators of the underdog effect (Jin & Huang, 2019; Shirai, 2017; Tezer, Bodur, & Grohmann, 2019), this article examines the effect of physical and performance risk associated with brand choice on consumer evaluations of brands employing underdog (vs. topdog) brand biographies, and the underlying mechanisms.

Perceived risk associated with brand choice plays an important role in consumers' information processing (Frewer et al., 1997; Gemünden, 1985) and brand evaluations (Campbell & Goodstein, 2001). For instance, in October 2020, Dr. Rhonda Patrick, a nutritional health expert, shared a Twitter post with her 300K+ followers, citing research on dangerous levels of chemicals—associated with negative consequences, such as immune system deficiencies—in carbonated water products (twitter.com/foundmyfitness/status/1313557599611047938). Such posts may increase the perceived risk associated with the choice of carbonated water brands, and affect their evaluation of brands associated with underdog (e.g., Ugly Drink) or topdog (e.g., Perrier, San Pellegrino) brand biographies.

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This article shows that when perceived physical or performance risk associated with brand choice is low, consumers respond more positively to an underdog (vs. topdog) brand. Narrative transportation—an immersion into the events conveyed in a story (Green & Brock, 2000)—underlies this effect. When risk is high and salient, consumers respond more positively to topdog (vs. underdog) brands. Consumers' inferences regarding the topdog brand's ability to reduce risk underlies this effect. This effect reverses when consumers have the opportunity to process the underdog brand biography prior to receiving high-risk information, as this allows for narrative transportation into the brand biography.

This article's contributions are twofold: First, it adds to the brand biography literature by examining the moderating role of risk, and contributes to emerging research on boundary conditions of the underdog effect (Delgado-Ballester, 2020; Jin & Huang, 2019; Kao, 2015, 2019; Tang & Tsang, 2020; Tezer et al., 2019). Moreover, the reversal of the underdog effect at high risk sheds light on contexts that generate topdog effects (Jin & Huang, 2019; Kao, 2019), and adds to research focusing on consumer-level moderators of brand biography effects (e.g., benign envy, Kao, 2019; low social power, Jin & Huang, 2019).

Second, this research elucidates consumers' processing of brand biographies at low versus high risk. While the literature posits that consumers generally engage in narrative processing of brand biographies (Avery et al., 2010), this research finds that narrative transportation is inhibited at high risk. Instead, consumers process brand biographies in view of the brand's ability to reduce risk, which favors topdog brands. Perceived risk thus shifts the processing of brand biographies from narrative processing toward inferences regarding the brands' ability to mitigate risk. Nonetheless, when consumers have engaged in narrative processing of a brand biography prior to encountering risk information, such processing

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mitigates subsequent high risk information. This suggests that narrative processing of brand biographies is contingent on contextual factors, and points to the limits of the extended transportation-imagery model (Van Laer et al., 2014) that describes consumers' processing of marketing narratives.

For managerial practice, this research suggests that when brands use biographies as a means of brand communication, it is critical to track perceived risk associated with brand choice in the category, and to identify incidents affecting perceived risk. This research provides initial guidelines with regard to the dissemination and design of brand biographies dependent on risk levels.

Theoretical Background

Brand Biography Effects

Brand biographies are narratives that convey the brand's trajectory from its beginnings to its current market position (Avery et al., 2010; Paharia et al., 2011). The literature distinguishes between underdog and topdog brand biographies. These differ in terms of the external disadvantage the brand initially faced, and its passion and determination (Paharia et al., 2011). Underdog brands are associated with high levels of external disadvantage, lack of resources, and passion/determination, whereas topdog brands are brands associated with low levels of external disadvantage and passion/determination (Paharia et al., 2011). Contrary to underdog brand biographies' emphasis on external disadvantage and passion/determination, topdog brand biographies frequently make reference to a brand's resources, as well as expertise (Delgado-Ballester, 2020; Jin & Huang, 2019; Kao, 2019; Paharia et al., 2011; Tang & Tsang, 2020; Tezer et al., 2019). Brand biography effects arise from an interaction of the external disadvantage and

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passion/determination dimensions, such that the effect of passion/determination is contingent on the level of external disadvantage reflected in the biography. The effect of passion/determination combined with low external disadvantage is not as positive as that of passion/determination and high external disadvantage—“when an externally disadvantaged company demonstrates passion and determination, consumers can easily identify with it and relate to its struggle. In contrast, the determination of a privileged and well-resourced company cannot inspire such a connection with the brand. Thus, it is the interaction between these two components that inspires greater self-brand connection and higher purchase intention for the company with an underdog brand biography.” (Paharia et al., 2011, p. 782).

Underdog brand biographies capitalize on consumers’ tendency to root for the underdog—a phenomenon observed across multiple domains, such as politics, sports, and music (Michniewicz & Edelman, 2019; Vandello et al., 2007). In marketing, the *underdog effect* captures consumers’ preference for brands associated with an underdog (vs. topdog) brand biography. The underdog effect occurs because consumers’ self-concept incorporates a chronic underdog disposition, which leads to feeling empathy for and greater identification with underdog brands (Delgado-Ballester, 2020; Jun et al., 2015; Paharia et al., 2011), which enhances brand evaluations (Paharia et al., 2011). Research suggests a stronger underdog effect for hedonic (vs. utilitarian) products (Shirai, 2017), established (vs. emerging) brands (Kao, 2015; Nagar, 2019), and when empathic concern for others is high (vs. low; Jun et al., 2015).

Despite support for an underdog effect, recent research identified contexts associated with a *topdog effect* (e.g., low social power, Jin & Huang, 2019; benign envy, Kao, 2019). Therefore, literature on brand biographies strongly supports the underdog effect, but identifies

factors that moderate, and sometimes reverse, this effect. Appendix A reviews consumer research on brand biography effects.

Brand Biographies and the Extended Imagery-Transportation Model

An important aspect of brand biographies is their narrative structure (Avery et al., 2010), which facilitates narrative transportation—an immersion into the story that allows readers to experience the events through the protagonist’s eyes (Gerrig, 1993; Green & Brock, 2000)—which leads to attitude change that is consistent with the narrative (Green, 2004; Green & Brock, 2000). The relation between narratives, narrative transportation, and persuasion is captured in the transportation-imagery model (Green & Brock, 2000), and the more recent extended transportation-imagery model (Van Laer et al., 2014). The latter focuses on consumers’ processing of marketing narratives (e.g., narrative advertising, Escalas, 2004, Phillips & McQuarrie, 2010; narrative product descriptions, Van den Hende et al., 2012; brand usage stories in brand communities, Muñiz & O’Guinn, 2001; Van Laer et al., 2014). The model identifies narrative-based (e.g., identifiable character, imaginable plot) and consumer-based (e.g., sex, education, transportability) antecedents to narrative transportation, and proposes a mediating role of narrative transportation in the relation between marketing narratives and consumer responses (Van Laer et al., 2014). Meta-analytic evidence supports the model and shows positive effects of narrative transportation on affective responses, narrative thoughts, beliefs, attitudes, intentions, and reduction of negative thoughts (Van Laer et al. 2014).

Narrative transportation leads to positive consumer responses, because in becoming transported into the narrative, consumers take the perspective of the protagonist and experience belief change in the absence of analytical processing (Escalas, 2007; Van Laer et al., 2014).

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Consumers' processing of narratives thus entails a distinct process through which narratives lead to persuasion (Gerrig, 1993; Green, 2004; Green & Brock, 2000; Van Laer, De Ruyter, Visconti, & Wetzels, 2014). This makes narrative processing a "third route to persuasion" (Avery et al., 2010, p. 215; Green & Brock, 2000) that complements dual-process models of persuasion (e.g., ELM, Petty & Cacioppo 1986; REI, Epstein, Pacini, Denes-Raj, & Heier, 1996). Dual-process models posit that consumers process marketing messages analytically, focusing on argument strength, or—in the absence of high levels of cognitive effort, time investment, involvement, or motivation—on heuristics, such as source credibility (Escalas, 2007; Petty & Cacioppo 1986). Narrative processing, on the other hand, leads to persuasion because it allows readers to relate the information in the narrative to their own experiences (Cooper et al, 2010; Escalas, 2004), emotionally engage with the narrative, and internalize narrative content (Van Laer et al., 2014). Empirical evidence in the context of narrative advertisements supports the distinction between narrative and analytical processing (Chang, 2009; Escalas, 2006).

Brand biography literature empirically supports that brand biographies trigger narrative transportation and positive consumer responses, consistent with the extended transportation-imagery model (Delgado-Ballester, 2020; Nguyen & Grohmann, 2020; Tezer et al., 2019). Congruence between brand biographies and consumers' self-concept is also a strongly supported antecedent of narrative transportation (Delgado-Ballester, 2020; Tezer et al., 2019). Because consumers frequently self-identify as underdogs, underdog (vs. topdog) brand biographies induce higher levels of narrative transportation, greater identification with, and more favorable evaluations of underdog (vs. topdog) brands (Delgado-Ballester, 2020; Paharia et al., 2011; Tezer et al., 2019).

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Recent findings diverge from the predictions of the extended transport-imagery model, however, and suggest that narrative processing of brand biographies is contingent on contextual factors. Narrative transportation is precluded, for example, when a brand biography is not congruent with consumers' self-concept (e.g., a consumer with an underdog self-concept reads a topdog brand biography); in this case, consumers engage in analytical processing of the brand biography (Tezer et al., 2019). These findings suggest that there are factors that shift consumers' processing of brand biographies from narrative processing—as proposed by the extended imagery-transportation model—to analytical processing. Few studies examine under what conditions brand biographies elicit narrative versus analytical processing, and what consequences this shift in processing entails (Chang, 2009; Escalas, 2006; Tezer et al., 2019), with only one focusing on brand biographies (Tezer et al., 2019)

The goal of this article is to shed light on consumers' processing of brand biographies, and to identify boundary conditions to narrative processing as proposed by the extended transportation-imagery model. To do so, this article focuses on the role of physical and performance risk in consumers' processing of brand biographies.

The Impact of Risk on Narrative Processing and Brand Biography Effects

Risk associated with brand choice captures the likelihood and magnitude of negative consequences arising from a decision (Campbell & Goodstein, 2001). Brand choice involves financial, social, performance, physical and psychological risk (Kaplan, Szybillo, & Jacoby, 1974). This research operationalizes risk associated with brand choice as physical and performance risk. Physical and performance risks are relevant to consumers, because they occur frequently (e.g., food contamination; product failure or malfunction), and have potentially

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serious consequences. Physical and performance risks are relevant to the brand biography context, because topdog (vs. underdog) brand biographies give rise to differential inferences regarding risk mitigation, which requires resources (e.g., for R&D, quality control, redress) and competence (e.g., product design, production)—most often attributed to topdogs (Paharia et al., 2011; Vandello et al., 2007). Inferences regarding a brand's resources and competence may therefore influence how consumers process and respond to brand biographies when physical and performance risk is high.

There is consistent evidence that risk perceptions influence how consumers process information and evaluate brands (Bitner & Obermiller, 1985; Campbell & Goodstein, 2001; Dowling, 1986; Dowling & Staelin, 1994; Gemünden, 1985; Gürhan-Canli & Batra, 2004). When risk is high, consumers engage in analytic elaboration (Bitner & Obermiller, 1985; Gürhan-Canli & Batra, 2004), and base brand evaluations on the perceived risk reduction function of the brand (Campbell & Goodstein, 2001; Heilman et al., 2000). This has implications for the processing of and responses to brand biographies: First, consumers exert greater cognitive effort on information processing when risk is high (Bitner & Obermiller, 1985; Gürhan-Canli & Batra, 2004), which induces analytic elaboration on relevant information and a focus on argument strength (Bitner & Obermiller, 1985; Gürhan-Canli & Batra, 2004; Petty & Cacioppo, 1986). When risk is low, the role of argument strength is diminished (Gürhan-Canli & Batra, 2004). For consumers' processing of brand biographies, this implies that high risk shifts consumers' processing to analytic elaboration, while inhibiting narrative transportation; low risk, on the other hand, do not induce analytic elaboration, and allow for the emergence of narrative transportation.

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Second, when risk is high, consumers prefer brands that they perceive to be instrumental in risk reduction (Campbell & Goodstein, 2001; Heilman et al., 2000). For instance, consumers prefer products that are congruent (vs. incongruent) with a product category schema when risk is high, as these imply a safer choice (Campbell & Goodstein, 2001). Similarly, consumers choose dominant brands to reduce the risk of first-time purchases in a product category (Heilman et al., 2000). Overall, when risk associated with brand choice is high, consumers scrutinize brand information (Bitner & Obermiller, 1986) and prefer brands that signal a high level of risk reduction. For consumers' processing of brand biographies at high risk, this implies that consumers are motivated to judge the brand's risk reduction function based on available brand information. Because topdog brand biographies lend themselves to inferences regarding resource availability (Paharia et al., 2011, Tezer et al., 2019)—which increases consumers' perceptions of a brand's ability to address problems or provide recourse, which decreases risk—as well as competence (Goldschmied & Vandello, 2012; Vandello et al., 2007), topdog brands signal a higher level of risk mitigation. The processing focus on the risk-reduction function of the brand at high levels of risk likely enhances consumer responses to topdog (vs. underdog) brands. At low risk, risk reduction is not a salient aspect in the processing of brand biographies. As a result, brand biographies likely induce narrative processing, in line with the extended transportation-imagery model (Van Laer et al., 2014). Narrative transportation favors the underdog brand, due to higher levels of consumer-brand identification (Paharia et al., 2011), and leads to an underdog effect.

In sum, while the extended transportation-imagery model suggests that consumers engage in narrative processing of brand biographies, research on the influence of risk suggests that consumers pursue risk-reduction strategies such as scrutinizing information and prefer brands

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that signal ability to reduce risk when risk associated with brand choice is high (Bitner & Obermiller, 1985; Petty & Cacioppo, 1986). Drawing on brand biography research, narrative transportation and perceived risk, we suggest that consumers process brand biographies differently at lower risk and higher levels of perceived risk, leading to differential consumer responses to underdog (vs. topdog) brand biographies.

Hypotheses

Building on brand biography effects, the extended transportation-imagery model, and the literature on the impact of risk on information processing, we predict that when perceived risk associated with brand choice is low, consumers engage in narrative processing of brand biographies, experience greater narrative transportation into the underdog (vs. topdog) brand biography, and respond more favorably to underdog (vs. topdog) brands. This prediction is in line with the extended transportation-imagery model (Van Laer et al., 2014), and empirical evidence supporting the underdog effect (Avery et al., 2010; Paharia et al., 2011; Tezer et al., 2019).

H1: At low levels of risk associated with brand choice, (a) consumers evaluate a brand associated with an underdog (vs. topdog) brand biography more favorably, and (b) this effect is mediated by narrative transportation.

When the risk associated with brand choice is high, consumers scrutinize brand biographies and base brand evaluations on inferences regarding the brand's ability to reduce risk (Campbell & Goodstein, 2001; Heilman et al., 2000). Topdog (vs. underdog) brand biographies

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are associated with resource availability and expertise, and signal competence (Goldschmied & Vandello, 2012; Vandello et al., 2007) as well as a strong ability to address problems or provide recourse (Paharia et al., 2011, Tezer et al., 2019). We therefore predict that at high risk levels, consumers perceive a brand with a topdog (vs. underdog) brand biography as more instrumental in risk reduction, resulting in more favorable brand evaluations.

H2: At high levels of risk associated with brand choice, (a) consumers evaluate a brand associated with a topdog (vs. underdog) brand biography more favorably, and (b) this effect is mediated by the perceived risk reduction function of the brand.

Study 1

Study 1 examines the effect of brand biography on brand evaluations contingent on physical risk associated with brand choice, and tests the underlying mechanisms (H1, H2).

Stimuli Development

Brand Biography. The experimental manipulation consisted of an underdog and a topdog biography for a fictitious ice cream brand. The use of a fictitious brand to precluded an unintended effect of prior brand associations (e.g., quality, credibility, familiarity; Erdem & Swait, 2004; Swait & Erdem, 2007) or expectations based on previous experience with the brand (Dunn et al., 1986) on the brands' perceived risk reduction function. The brand biographies were adapted from prior research (Paharia et al., 2011; Tezer et al., 2019; see Appendix B). The brand biography manipulation was validated in a one-factor between-participants design (brand biography: topdog, underdog) with 117 Amazon Mechanical Turk (MTurk) participants (35.9%

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female, $M_{\text{age}} = 35.9$, $SD = 10.6$). Participants indicated to what extent the brand was externally disadvantaged (externally disadvantaged/lacks resources; 1 = describes the brand not at all, 7 = very well; $r = .89$, $p < .01$; adapted from Paharia et al., 2011), and passionate/determined (passionate/determined/perseverant; 1 = describes the brand not at all, 7 = very well; $\alpha = .89$; Paharia et al., 2011). An ANOVA confirmed that the underdog brand was perceived as more externally disadvantaged and lacking resources ($M_{\text{underdog}} = 5.03$, $SD = 1.56$ vs. $M_{\text{topdog}} = 1.69$, $SD = 1.03$; $F(1, 115) = 188.16$, $p < .001$, $\eta^2 = .621$), and as more passionate and determined ($M_{\text{underdog}} = 6.51$, $SD = .81$ vs. $M_{\text{topdog}} = 5.76$, $SD = 1.04$; $F(1, 115) = 18.81$, $p < .01$, $\eta^2 = .141$).

Risk Associated with Brand Choice. The risk manipulation consisted of information about the percentage of foodborne illnesses due to ice cream consumption reported in the previous year (Appendix B shows manipulations used in this research). In a single-factor between-participants design (risk: low = 1%, high = 23%), 102 MTurk participants (42.2% female, $M_{\text{age}} = 36.3$, $SD = 11.2$) indicated perceived risk associated with ice cream consumption (1 = not at all risky/concerning/worrisome/important, 7 = very risky/ concerning/worrisome/important; $\alpha = .95$; Campbell & Goodstein, 2001). An ANOVA confirmed that participants in the high (vs. low) risk condition perceived a greater physical risk ($M_{\text{high risk}} = 4.60$, $SD = 1.41$; $M_{\text{low risk}} = 3.63$, $SD = 1.74$; $F(1, 100) = 9.49$, $p < .01$, $\eta^2 = .087$).

Method

Two hundred and three MTurk participants (47.8% female, $M_{\text{age}} = 41.5$, $SD = 12.9$) were randomly assigned to one of the experimental conditions in a 2 (risk: low, high) \times 2 (brand biography: topdog, underdog) between-participants design. Participants read the risk manipulation, followed by the brand biography manipulation, and completed measures of brand

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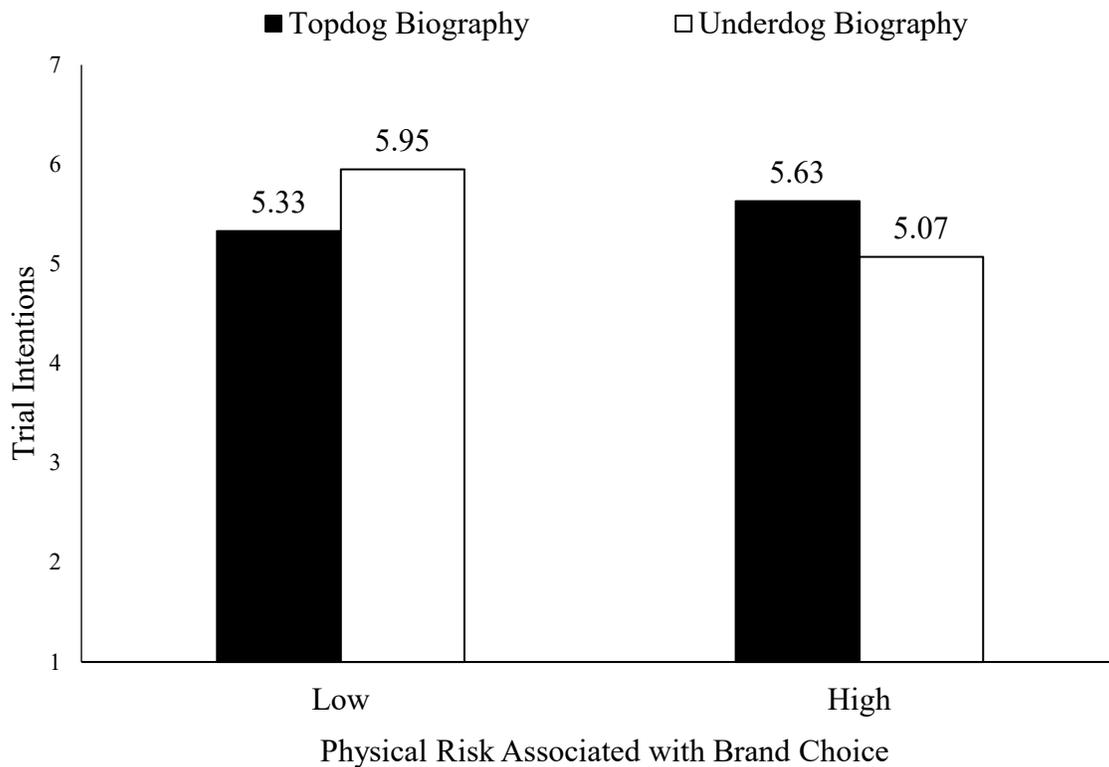
trial intentions ($r = .94, p < .001$), narrative transportation ($\alpha = .83$), and the brand's risk reduction function ($r = .80, p < .001$). Appendix C shows measures and items.

Results

An ANOVA with brand biography and risk serving as independent variables, and trial intentions as the dependent variable, revealed only a significant interaction effect ($F(1, 199) = 9.16; p < .01; \eta^2 = .044$). The underdog brand biography led to greater trial intentions at low levels of risk ($M_{\text{topdog}} = 5.33, SD = 1.42; M_{\text{underdog}} = 5.95, SD = 1.23; F(1, 199) = 5.02, p < .05, \eta^2 = .025$). This effect was reversed in the high risk condition, where the topdog brand biography evoked greater trial intentions ($M_{\text{topdog}} = 5.63, SD = 1.23; M_{\text{underdog}} = 5.07, SD = 1.63; F(1, 199) = 4.16, p < .05, \eta^2 = .020$). Furthermore, for the underdog brand biography, trial intentions were greater in the low risk condition ($M_{\text{low risk}} = 5.95, SD = 1.23; M_{\text{high risk}} = 5.07, SD = 1.63; F(1, 199) = 10.63, p < .01, \eta^2 = .051$), whereas trial intentions did not vary as a function of risk in the topdog brand biography condition ($M_{\text{low risk}} = 5.33, SD = 1.42; M_{\text{high risk}} = 5.63, SD = 1.23; F(1, 199) < 1, p > .25$). Figure 1 illustrates these findings.

Figure 1 – Effects of Brand Biography and Physical Risk on Trial Intentions (Study 1)

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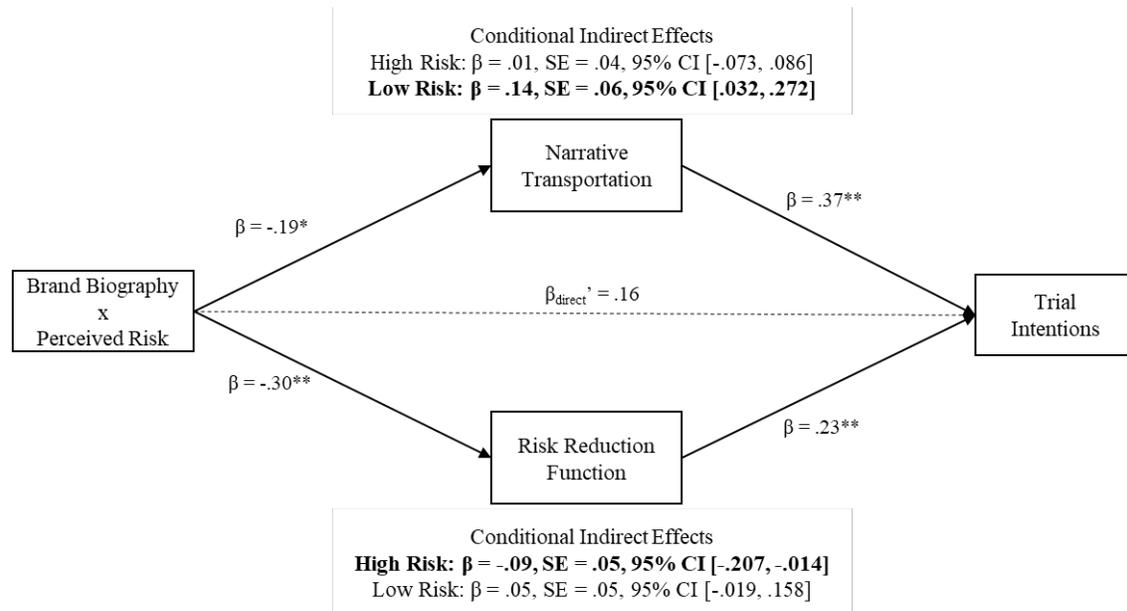


Next, we examined the conditional indirect effect of brand biography on trial intentions through narrative transportation and the risk reduction function of the brand. A PROCESS model (model 8, 10,000 bootstrap samples; Hayes 2017), with brand biography (-1 = topdog, 1 = underdog) as the predictor, risk (-1 = low, 1 = high) as the moderator, narrative transportation and risk reduction function of the brand as parallel mediators, and trial intentions as the criterion, provided support for the hypotheses. The positive effect of the underdog (vs. topdog) brand biography on trial intentions in the low risk condition was mediated by narrative transportation ($\beta_{\text{indirect}} = .14$, $SE = .06$, 95% CI [.032, .272]), but not by the brand's risk reduction function ($\beta_{\text{indirect}} = .05$, $SE = .05$, 95% CI [-.019, .158]). The positive effect of the topdog (vs. underdog) brand biography on trial intentions in the high risk condition was mediated by the risk reduction

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function of the brand ($\beta_{\text{indirect}} = -.09$, SE = .05, 95% CI [-.207, -.014]), but not by narrative transportation ($\beta_{\text{indirect}} = .01$, SE = .04, 95% CI [-.073, .086]). Figure 2 summarizes these results.

Figure 2 – Conditional Indirect Effect of Brand Biography on Trial Intentions (Study 1)



* $p < .05$

** $p < .01$

Discussion

Study 1 supports a moderating role of physical risk in the relation between brand biography and brand trial intentions. It replicates the underdog effect (Paharia et al., 2011) at low risk. When risk was high, the pattern of results reversed, and consumers indicated greater trial intentions for the topdog brand. Furthermore, narrative transportation mediated the positive effect of underdog brand biography on trial intentions at low risk, whereas the brand's risk reduction function mediated the positive effect of the topdog brand biography. These results support H1 and H2.

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To explore the robustness of these findings, a follow-up study examined the role of individual differences in underdog disposition (Paharia et al., 2011), lay rationalism (Hsee et al., 2015), risk-taking propensity (Zhang et al., 2019), and uncertainty avoidance (Jung & Kellaris, 2004) in the relation between brand biography, physical risk, and brand trial intentions. This study used the procedure and stimuli employed in Study 1. After reading the risk and brand biography manipulations, 257 MTurk participants (49.8% female, $M_{\text{age}} = 37.7$, $SD = 11.2$) completed measures of brand trial intention ($r = .93$, $p < .001$), narrative transportation ($\alpha = .86$), the brand's risk reduction function ($r = .89$, $p < .001$), underdog disposition ($\alpha = .87$), lay rationalism ($\alpha = .86$), risk-taking propensity ($\alpha = .97$), and uncertainty avoidance ($\alpha = .87$; see Appendix C).

An ANCOVA with brand biography and physical risk serving as independent variables, trial intentions as the dependent variable, and underdog disposition, lay rationalism, risk-taking propensity, and uncertainty avoidance as covariates, yielded only a significant interaction effect ($F(1, 249) = 9.27$, $p < .01$, $\eta^2 = .036$), such that the underdog (vs. topdog) brand biography elicited greater trial intentions in the low risk condition ($M_{\text{topdog}} = 5.56$, $SD = 1.44$; $M_{\text{underdog}} = 5.98$, $SD = 1.16$; $F(1, 249) = 4.04$, $p < .05$, $\eta^2 = .016$). The topdog (vs. underdog) brand biography enhanced trial intention in the high risk condition ($M_{\text{topdog}} = 5.79$, $SD = 1.08$; $M_{\text{underdog}} = 5.28$, $SD = 1.25$; $F(1, 249) = 5.26$, $p < .05$, $\eta^2 = .021$). Results remained consistent when the model omitted individual difference variables or included them individually.

An analysis of indirect effects with underdog disposition, lay rationalism, risk-taking propensity and uncertainty avoidance as covariates (PROCESS model 8, 10,000 bootstrap samples; Hayes 2017) revealed a significant indirect effect of brand biography on trial intentions through narrative transportation ($\beta_{\text{indirect}} = .08$, $SE = .04$, 95% CI [.022, .162]), but not through

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the brand's risk reduction function ($\beta_{\text{indirect}} = -.01$, SE = .03, 95% CI [-.074, .050]) when risk was low. At high risk, the effect of brand biography was mediated by the brand's risk reduction function ($\beta_{\text{indirect}} = -.08$, SE = .03, 95% CI [-.152, -.023]), but not by narrative transportation ($\beta_{\text{indirect}} = -.03$, SE = .04, 95% CI [-.111, .019]). Results were consistent without inclusion of covariates or with inclusion of individual covariates. This suggests that the interactive effect of brand biography and risk is robust after controlling for individual differences.

Study 2

Study 1 suggest that high (vs. low) risk suppresses consumers' narrative processing of an underdog brand biography, resulting in less favorable consumer responses to an underdog (vs. topdog) brand. To examine whether the negative impact of high risk on underdog brands can be mitigated, Study 2 examines one factor influencing consumers' processing and responses to brand biographies under high risk—the presentation order of risk and brand biography information.

Research on order effects suggests that the order of information presentation influences consumers' information processing strategies, as well as subsequent evaluations (Buda & Zhang, 2000; Haugtvedt & Wegener, 1994; Kardes & Herr, 1990). When information received first is personally relevant, consumers weigh it more heavily than subsequent information (i.e., a primacy effect; Haugtvedt & Wegner, 1994). Information related to high physical risk, in particular, is of high personal relevance, and increases processing motivation and analytic elaboration (Frewer et al., 1997). This suggests that when consumers receive information about high risk prior to brand biography information, analytic processing and a focus on the brand's risk reduction function should lead to a topdog effect. When a brand biography precedes

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information about high risk associated with brand choice, risk information is not salient in the processing of the brand biography. As a result, narrative processing is not inhibited, and a positive evaluation of the underdog brand likely arises. Due to the lower salience of risk information when it follows brand evaluations, we would therefore expect a more positive evaluation of the underdog brand when consumers have the opportunity to engage in narrative processing of the brand biography before encountering high risk information.

Stimuli Development

Brand Biography. Study 2 focused on performance risk of a fictitious brand of speakers. The underdog and a topdog biography manipulations were adapted from past research (Paharia et al., 2011; Tezer et al., 2019; see Appendix B). In a one-factor between-participants pretest (brand biography: underdog, topdog), 105 MTurk participants (38.1% female, $M_{\text{age}} = 39.1$, $SD = 11.7$) rated the brand's external disadvantage ($r = .86$, $p < .01$) and passion and determination ($\alpha = .90$), using the items from Study 1. The brand biography manipulation was successful. An ANOVA revealed that the underdog (vs. topdog) brand biography was perceived as more externally disadvantaged ($M_{\text{underdog}} = 5.04$, $SD = 1.65$ vs. $M_{\text{topdog}} = 2.03$, $SD = 1.41$; $F(1, 103) = 100.31$, $p < .001$, $\eta^2 = .493$) and more passionate and determined ($M_{\text{underdog}} = 6.48$, $SD = .76$ vs. $M_{\text{topdog}} = 5.97$, $SD = 1.25$; $F(1, 103) = 6.43$, $p < .05$, $\eta^2 = .059$).

Risk Associated with Brand Choice. Study 2 manipulated the order of brand biography and risk information, and held risk constant (high) across conditions. In a pretest, 96 MTurk participants (37.5% female, $M_{\text{age}} = 39.4$, $SD = 11.2$) read a purported research report indicating that 23% of product failures, product returns, and product recalls reported in the consumer electronics product category in the previous year were accounted for by speakers. Participants

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indicated risk associated with the purchase of speakers (1 = not at all risky/concerning/worrisome/important, 7 = very risky/ concerning/worrisome/important; $\alpha = .91$; Campbell & Goodstein, 2001). Mean risk ($M_{\text{risk}} = 5.18$, $SD = 1.16$) was significantly higher than scale midpoint ($M_{\text{difference}} = 1.18$; $t_{95} = 9.96$, $p < .01$), indicating that the high performance risk manipulation was successful.

Method

Two hundred MTurk participants (52.5% female, $M_{\text{age}} = 43.5$, $SD = 13.0$) took part in a 2 (order of information: risk first, brand biography first) \times 2 (brand biography: underdog, topdog) between-participants experiment, with performance risk at high levels across conditions.

In the risk information first condition, participants read the report indicating that the performance risk associated with speakers was relatively high, and then received information about a new audio brand in the form of the brand biography manipulation. In the brand biography first condition, participants first viewed to the brand biography manipulation, followed by information about the performance risk. Next, participants completed measures of purchase intentions regarding a pair of speakers ($r = .93$, $p < .001$), narrative transportation ($\alpha = .85$), and risk reduction function of the brand ($r = .84$, $p < .001$; see Appendix C for measures).

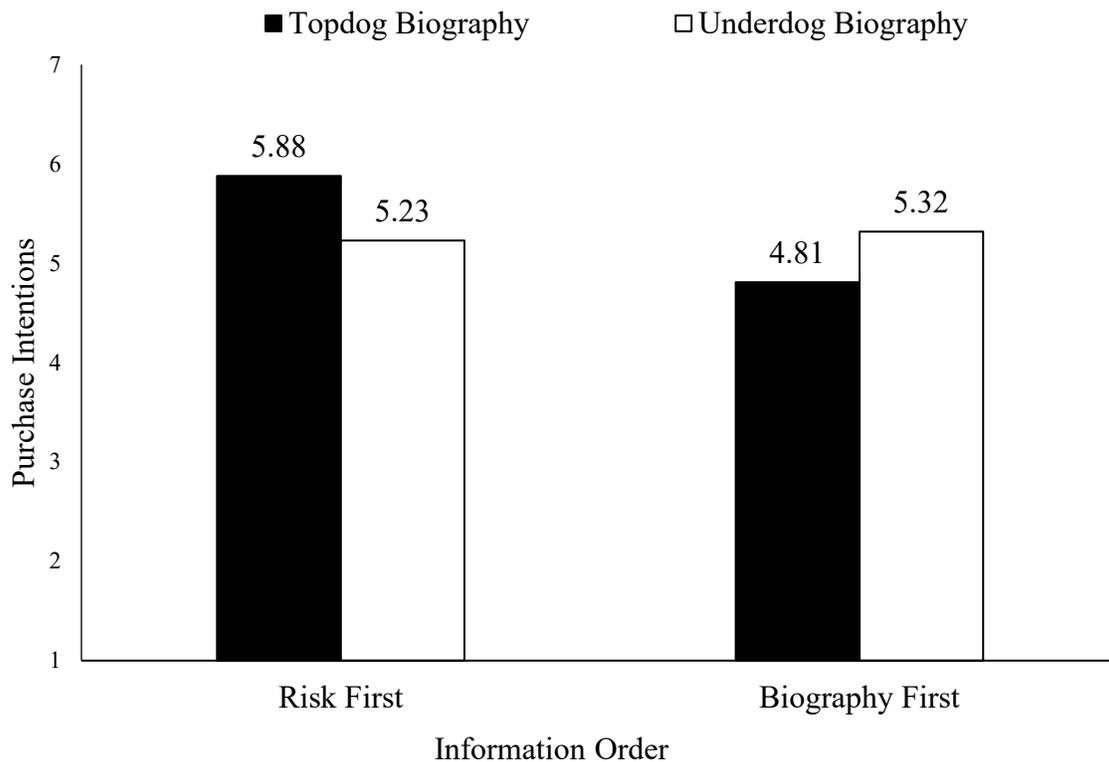
Results

An ANOVA with brand biography and information order serving as independent variables and purchase intentions as the dependent variable, shows a significant main effect of information order ($M_{\text{risk first}} = 5.56$, $SD = 1.14$; $M_{\text{biography first}} = 5.07$, $SD = 1.49$; $F(1, 196) = 12.08$,

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$p < .01$, $\eta^2 = .036$), and a significant brand biography \times information order interaction ($F(1, 196) = 10.19$, $p < .01$, $\eta^2 = .049$), as illustrated in Figure 3.

Figure 3 – Effects of Brand Biography and Information Order on Purchase Intentions at High Levels of Risk (Study 2)



When high performance risk information preceded the brand biography (as in Study 1), purchase intentions were greater in response to a topdog (vs. an underdog) biography ($M_{\text{topdog}} = 5.88$, $SD = 1.12$; $M_{\text{underdog}} = 5.23$, $SD = 1.08$; $F(1, 196) = 7.01$, $p < .01$, $\eta^2 = .035$). When the brand biography preceded high performance risk information, purchase intentions were marginally greater for a brand associated with an underdog (vs. topdog) biography ($M_{\text{topdog}} = 4.81$, $SD = 1.64$; $M_{\text{underdog}} = 5.32$, $SD = 1.30$; $F(1, 196) = 3.63$, $p < .06$, $\eta^2 = .018$). For the topdog

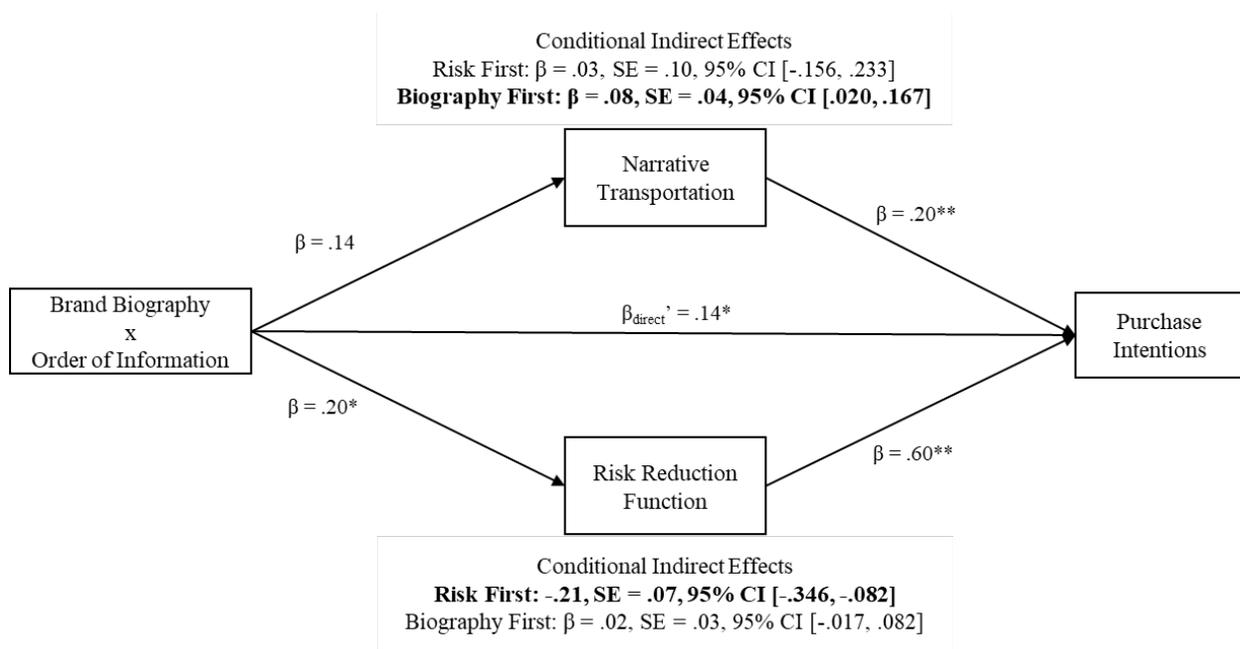
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brand biography, the effect of order of risk information was significant ($M_{\text{risk first}} = 5.88$, $SD = 1.12$; $M_{\text{biography first}} = 4.81$, $SD = 1.64$; $F(1, 196) = 17.19$, $p < .01$, $\eta^2 = .081$), for the underdog biography order of risk information did not significantly influence purchase intentions ($M_{\text{risk first}} = 5.23$, $SD = 1.08$; $M_{\text{biography first}} = 5.32$, $SD = 1.30$; $F(1, 196) = .72$, $p > .70$).

Next, we examined the conditional indirect effect of brand biography on purchase intentions through narrative transportation and the risk reduction function of the brand. A PROCESS model (model 8, 10,000 bootstrap samples; Hayes 2017), with brand biography (-1 = topdog, 1 = underdog) as the predictor, order of risk information (-1 = risk information first, 1 = biography first) as the moderator, narrative transportation and risk reduction function of the brand as parallel mediators, and purchase intentions as the criterion shows that when brand biography preceded risk information, the underdog brand biography had a significant indirect effect on purchase intentions through narrative transportation ($\beta_{\text{indirect}} = .08$, $SE = .04$, 95% CI [.020, .167]), while its indirect effect through risk reduction function of the brand was not significant ($\beta_{\text{indirect}} = .03$, $SE = .10$, 95% CI [-.156, .233]). The positive effect of the topdog brand biography on purchase intentions when risk information preceded brand biography, on the other hand, was mediated by the risk reduction function of the brand ($\beta_{\text{indirect}} = -.21$, $SE = .07$, 95% CI [-.346, -.082]), but not narrative transportation ($\beta_{\text{indirect}} = .02$, $SE = .03$, 95% CI [-.017, .082]). These findings replicate the effects observed in Study 1. Figure 4 illustrates mediation results.

Figure 4 – Conditional Indirect Effect of Brand Biography on Purchase Intentions (Study 2)

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Discussion

Study 2 showed that an underdog effect can occur under high risk, Participants who read a brand biography prior to receiving high risk information indicated marginally greater purchase intentions for the brand with an underdog (vs. topdog) biography, and this effect was mediated by narrative transportation. A topdog effect driven by the brand's risk reduction function emerged when participants received information regarding high performance risk prior to exposure to a brand biography, replicating Study 1 results. The effects were driven by more negative consumer response toward topdog brands in the biography (vs. risk) first condition. This implies that risk salience and the perceptions of brand's risk reduction function are important aspects of brand evaluations.

General Discussion

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This research examines the moderating effect of physical and performance risk on consumers' processing of brand biographies and subsequent brand evaluations. When risk is low, consumers experience a higher degree of narrative transportation into the underdog (vs. topdog) brand biography, resulting in increased purchase intentions for the underdog brand. These findings are consistent with the extended transportation-imagery model (Van Laer et al., 2014), and the underdog effect (Paharia et al., 2011) and. When risk is high, the topdog (vs. underdog) brand biography elicits more positive consumer responses, due to a greater perceived risk reduction associated with the topdog brand. The negative effect of high risk on underdog (vs. topdog) brands is mitigated when an underdog brand biography precedes, rather than follows, high risk information.

Theoretical Implications

The impact of perceived risk on brand evaluations is well established (Campbell & Goodstein, 2001; Dowling & Staelin, 1994; Erdem & Swait, 2004; 2007; Gürhan-Canli & Batra, 2004), although research generally examines the impact of perceived risk in the context of persuasive appeals. How perceived risk influences consumer responses to brand narratives therefore remained unaddressed.

To close this gap, this research examined the moderating role of perceived risk in the relation between brand biographies and consumers' trial or purchase intentions. It shows that physical and performance risk moderates the relationship between brand biographies and consumer responses to the brand by influencing whether consumers process brand biographies narratively or analytically, by focusing on the brand's risk reduction function. These findings have implications for the literature on brand biographies and narrative processing: First, this

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research identifies risk as a moderator of brand biography effects. It complements recent findings regarding the boundary conditions and reversals of the underdog effect (Jin & Huang, 2019; Kao, 2015). Second, this research highlights that risk influences *how* consumers process brand biographies. The literature suggests that consumers processing of marketing narratives (Van Laer et al., 2014) and brand biographies, in particular (Avery et al., 2010; Delgado-Ballester, 2020; Nguyen & Grohmann, 2020; Tezer et al., 2019) entails narrative transportation. This research demonstrates that narrative transportation arises only when risk is low or not salient at the time consumers process the brand biography. When risk is high, narrative transportation into brand biographies is inhibited; instead, consumers focus on the brand's risk reduction potential, which favors brands associated with topdog (vs. underdog) brand biographies. This shift from narrative to analytic processing is not subsumed in the extended-transportation imagery model (Van Laer et al., 2014), nor in dual-process models of persuasion (e.g., ELM, Petty & Cacioppo 1986; REI, Epstein, Pacini, Denes-Raj, & Heier, 1996). This points toward the importance of integrating narrative and analytic processing, and of identifying antecedents and moderators leading to narrative transportation versus analytic processing of brand biographies. To date, only few studies have considered narrative versus analytical processing of narrative marketing stimuli (of narrative ads: Escalas, 2007; of brand biographies: Tezer et al., 2019), and none speaks to the role of risk in this process. Relatedly, while this research focused on brand biographies, it would be informative to consider to what extent the findings replicate for other marketing narratives (e.g., narrative advertisements, Deighton et al., 1989; Escalas, 2004; narrative product descriptions, Van den Hende et al., 2012). These are more obviously persuasive appeals compared to brand biographies, but nonetheless processed narratively under certain

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circumstances. It is possible that risk information inhibits narrative transportation and reduces the effectiveness of such communication tools as well.

Managerial Implications

The findings have implications for the use of brand biographies in marketing communications. Brands offering products that are associated with higher physical or performance risk (e.g., pharmaceuticals) benefit from the use of topdog brand biographies, because such brand biographies signal greater potential of risk reduction through the brand. This is due to topdog brand's associations with competence (Vandello et al., 2007) and financial resources (Paharia et al., 2011), which may reassure consumers that the brand is able to minimize risk in production or service delivery, and has the means to provide adequate compensation if risk realizes.

When risk is low or when consumers had the opportunity to process a brand biography prior to encountering information regarding high risk, the salience of risk and the associated need for risk reduction through the brand decreases. In such contexts, underdog brands benefit in comparison to topdog brands, because consumers immerse themselves in underdog brand biographies, experience narrative transportation, and consequently respond more favorably to the brands.

Given that brand biography effects are contingent on consumers' risk perceptions, brands require a good understanding of risk associated with their product categories before implementing a brand biography-based communication strategy. In this process, marketing research is critical. A follow-up study (MTurk, n = 50, 64% female, median age = 34.5 years) measured risk associated with various products categories ("In your opinion, what is the level of

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risk of experiencing a negative consequence having purchased the products or used the services listed below?" 1= very low, 7 = very high) to illustrate that risk perceptions vary considerably across categories, and can therefore have an important impact on how consumers process and evaluate brand biographies. Table 1 shows the range and variation of consumers' risk perceptions.

Table 1 – Risk Perceptions across Product Categories

| Product Category | Perceived Risk | |
|-------------------------------|----------------|------|
| | Mean | SD |
| Cars | 4.31 | 1.34 |
| Pharmaceuticals | 4.24 | 1.61 |
| Financial Assistance Services | 4.02 | 1.68 |
| Plane Tickets | 3.71 | 1.56 |
| Life/Home Insurance | 3.59 | 1.94 |
| Hotel – Leisure | 3.57 | 1.54 |
| Appliances | 3.49 | 1.28 |
| Home Improvement Tools | 3.39 | 1.40 |
| Meat and Poultry | 3.35 | 1.68 |
| Home Security Devices | 3.33 | 1.60 |
| Fish & Seafood | 3.27 | 1.41 |
| Cosmetics Products | 3.18 | 1.24 |
| Household Cleaning Products | 3.10 | 1.46 |
| Haircuts | 3.08 | 1.50 |
| Wine | 3.04 | 1.35 |
| Soda Drinks | 3.02 | 1.59 |
| Laptops | 3.02 | 1.45 |
| Dairy Products | 3.00 | 1.43 |
| TV | 2.90 | 1.54 |
| Pet Care Products | 2.88 | 1.27 |
| Movie Tickets | 2.76 | 1.55 |
| Oral Hygiene Products | 2.61 | 1.41 |
| Snacks | 2.55 | 1.39 |
| Dance Classes | 2.51 | 1.12 |
| Winter Coats | 2.24 | 1.16 |

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In this illustrative follow-up study, risk perceptions are a function of category definitions. Within product categories, variations in risk perceptions associated with sub-categories are likely (e.g., poultry may be associated with a higher physical risk than red meat; over-the-counter medication may be associated with less physical and performance risk compared to a newly introduced COVID-19 vaccine). In practice, product category or context definitions are therefore important.

The follow-up study also captures risk perceptions at a single point in time, whereas consumers' risk perceptions change over time. For instance, Table 1 indicates that dance classes were associated with relatively low risk at the time of measurement. In the current context characterized by social distancing to alleviate the spread of the COVID-19 virus, dance classes are likely associated with high levels of physical risk. For brands that employ underdog biographies in low-risk product categories, it is therefore important to take into account that uncontrollable contextual factors influence perceived risk. This research nonetheless suggests that if a brand's underdog biography has reached its target audience prior to information that signals an increase in risk, the brand may not lose ground to a topdog brand.

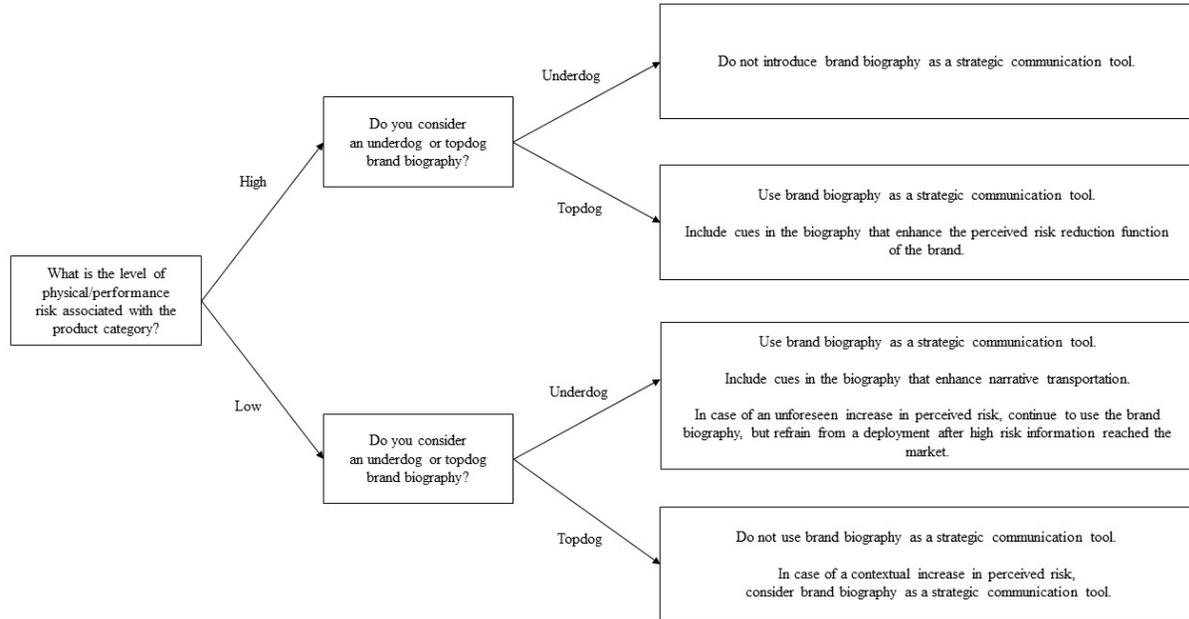
An important question in the risk assessment preceding the choice of brand biographies as a communication strategy pertains to the level of risk at which the choice of a topdog (versus underdog) brand biography presents clear advantages. Pretests to Studies 1 and 2 suggest that the scale mid-point (on a seven-point scale) is a useful criterion. In using secondary data (such as the data in Table 1), risk can be assessed relative to risk perceptions associated with related product categories. These are initial guidelines for the choice of brand biographies until further validation occurs.

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Finally, once a brand has decided on the adoption of an underdog or topdog brand biography, the design of the brand biography becomes a critical step. Brands associated with an underdog brand biography and operating in a low risk context benefit from facilitating narrative transportation, as this enhances subsequent brand evaluations (de Graaf 2014; Tezer et al. 2019; Van den Hende et al. 2012; Van Laer et al. 2014). Strategies to enhance narrative transportation could involve portrayal of identifiable characters in a realistic and imaginable plot (Van Laer et al. 2014) or inclusion of information that evokes high levels of congruence with the brands' target consumers (Tezer et al. 2019). Topdog brand biographies, on the other hand, influence consumer responses due to their risk reduction function, and should therefore emphasize elements that allow consumers to make positive inferences regarding risk mitigation (e.g., information pertaining to competence, such as the brand's reputation; information regarding resources, such as the amount of money spent on R&D). Figure 5 summarizes the managerial implications, and provides guidelines for the choice of brand biographies contingent on risk levels and the likely timing of risk information.

Figure 5 – Guidelines for the Use of Brand Biographies at Different Risk Levels

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Limitations and Future Research

This research focused on physical and performance risk. An important question is whether the findings generalize to other risk types, such as social risk or financial risk. The theoretical framework proposed here suggests that a topdog effect emerges when risk is high, regardless of risk type. A follow-up 2 (risk: low, high) \times 2 (brand biography: topdog, underdog) between-participants study (255 MTurk participants; 54.1% female, $M_{\text{age}} = 43.4$, $SD = 13.4$) examined this possibility by manipulating *social* risk. The experimental stimuli and procedure were identical to Study 1. The high [low] risk condition suggested that the parents of participants' significant other [their best friend] were visiting for dinner and that they needed to choose ice cream to serve as dessert (adapted from Campbell & Goodstein, 2001). After reading the underdog or topdog brand biography, participants indicated purchase likelihood for the ice cream brand ($r = .98$, $p < .001$). The risk \times brand biography interaction was significant ($F(1, 251) = 10.82$, $p < .01$, $\eta^2 = .041$), such that an underdog effect emerged in the low risk condition

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($M_{\text{topdog}} = 5.07$, $SD = 1.84$; $M_{\text{underdog}} = 5.66$, $SD = 1.57$; $F(1, 251) = 4.68$, $p < .05$, $\eta^2 = .018$), and a topdog effect in the high risk condition ($M_{\text{topdog}} = 5.94$, $SD = .95$; $M_{\text{underdog}} = 5.28$, $SD = 1.57$; $F(1, 251) = 6.23$, $p < .05$, $\eta^2 = .024$). These findings provide preliminary evidence that the effect generalizes to different risk types, but further research is needed.

Finally, although this article contributes to an understanding of moderators of brand biography effects, research on boundary conditions is only emerging (e.g., Jin & Huang, 2019; Kao, 2015, 2019; Tezer et al., 2019), and many avenues for future research remain. These could include text analysis of consumers' social media posts with regard to underdog (vs. topdog) brands in the COVID-19 context, which is characterized by varying levels of perceived risk as a function of the rate of infection (over time, across regions).

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Appendix A: Brand Biography Effects in Consumer Research

| Reference | Independent Variable | Moderator(s) | Mediator(s) | Dependent Variable(s) | Main Finding(s) |
|----------------------|--|--|------------------------------------|---|--|
| Paharia et al., 2011 | Brand biography | Cultural identity Purchase situation | Self-brand connection | Brand preference Purchase intentions | Underdog effect, process, and moderation of the underdog effect: Greater brand preference and purchase intentions for brands associated with an underdog (vs. topdog) brand biography, mediated by self-brand connection. The underdog effect is stronger in cultures where the underdog concept is a part of a cultural identity; effect dissipates for purchase for others (e.g., a gift). |
| Jun et al., 2015 | Brand Biography | Individual differences in empathic concern | Emphatic response to advertisement | Brand attitude | Underdog effect, process, and moderation of the underdog effect: Underdog effect is stronger for consumers with high (vs. low) empathic concern; this effect is mediated by empathic response to advertisement. |
| Kao, 2015 | Individual differences in underdog disposition | Brand status Explicitness of underdog biography | - | Brand preference | Brand biography as moderator: Consumers with strong underdog disposition have higher brand preference for established (vs. emerging) brands associated with an explicit underdog biography; this effect disappears for implicit underdog biographies. |
| Shirai, 2017 | Brand biography | Consumption domain | - | Brand evaluations | Moderation of the underdog effect: |

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| | | | | | <p>Stronger underdog effect when the consumption domain is hedonic (vs. utilitarian) and when retail crowding is adequate (vs. uncrowded).</p> <p>Moderating role of perceived risk: At low perceived risk, the positive relation between crowding and evaluation is stronger for the underdog (vs. topdog) brand biography; evaluation was higher when the underdog store was adequately crowded (vs. uncrowded); topdog store evaluation did not differ crowding conditions.</p> <p>At high perceived risk, significant and positive effect of crowding on both underdog and topdog stores.</p> |
| Kirmani et al., 2017 | Service provider competence / morality | Underdog / topdog positioning | Empathy | Choice of service provider | <p>Moderating role of brand biography:</p> <p>Consumers prefer service provider competence over morality, but underdog positioning moderates this effect.</p> <p>When a moral service provider is positioned as an underdog, consumer empathy mitigates lack of competence. Underdog positioning does not compensate for deficit in morality for competent providers, or a deficit in competence for warm providers.</p> |

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| Jin & Huang, 2019 | Brand biography | Perceived social power | Perceived instrumentality in power expression Perceived instrumentality in power restoration | Brand attitudes Purchase intention | Underdog effect, process, and moderation of the underdog effect (reversal to topdog effect): Underdog effect when consumers feel like having high social power; effect is mediated by perceived instrumentality in power expression. Topdog effect when consumers feel like having low social power; effect is mediated by perceived instrumentality in power restoration. |
| Li & Zhao, 2018 | Brand biography | Product type | - | Brand identification | Underdog effect, moderation of the underdog effect (reversal to topdog effect) : Identification with the brand associated with an underdog (vs. topdog) biography is stronger when the product is hedonic; brand identification with the topdog (vs. underdog) biography is higher when the product is utilitarian. |
| Shin, Warnick, & Baker, 2018 | Brand biography | Brand localness Political ideology | - | Purchase intentions Willingness to pay a premium | Moderation of the underdog effect: Underdog effect is stronger for local (vs. non-local) brands and among liberal (vs. conservative) consumers. |
| Kim, Park, & Lee, 2019 | Brand biography | Brand transgression type | Perceived anger | Brand forgiveness | Moderation of the underdog effect: Underdog effect in response to a non-relational brand transgression in terms of intentions to forgive a brand; this |

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| | | | | | effect disappears for relational brand transgressions. |
| Tezer, Bodur, & Grohmann, 2019 | Brand biography | Information source | Narrative transportation Analytic elaboration | Brand attitude | Moderation of the underdog effect, process: The underdog effect occurs when the information source is a brand, but not an independent, source; this effect is mediated by narrative transportation and analytic elaboration. |
| Han & Kim, 2019 | Brand biography | Individual differences in social value orientation Cause of product scarcity | - | Purchase intentions | Moderation of the underdog effect: The underdog effect emerges among consumers with high social value orientation but disappears for those with low social value orientation. Among consumers with high social value orientation, the underdog effect is stronger, when there is a demand-caused (vs. supply-caused) product scarcity. |
| Nagar, 2019 | Brand biography | Brand familiarity Evaluation context | - | Brand evaluations | Moderation of the underdog effect (reversal to topdog effect): Underdog brand biographies for established brands elicit stronger consumer response than underdog brand biography for new brands. Participants exposed to underdog brand biographies are likely to engender more positive attitude toward the brand when their consumption is kept private than |

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| | | | | | when their consumption is subject to public scrutiny. |
| | | | | | A topdog effect occurs when consumers' evaluations are public. |
| Kao, 2019 | Brand biography | Individual differences in envy Psychological distance | - | Brand preference | Moderation of the underdog effect (reversal to topdog effect): When a brand is characterized by proximal psychological distance, an underdog (<i>a topdog</i>) effect is observed among consumers with malicious (<i>benign</i>) envy; these effects disappear when a brand is characterized by distant psychological distance. |
| Delgado-Ballester, 2020 | Brand biography | Consumer implicit mindset | Immersion in the story Emphatic feelings | Consumer-brand identification | Moderation of the underdog effect, process: The underdog (vs. topdog) brand biography leads to greater brand identification for consumers with a growth mindset; , the effect disappears for those with a fixed mindset Underdog effect on brand identification is mediated by story immersion and emphatic feelings. |
| Tang & Tsang, 2020 | Brand biography | Personal control Shopping orientation | Inspiration to cope with their loss of control | Brand preference Willingness to pay | Moderation of the underdog effect (reversal to topdog effect), process: Underdog effect among consumers who feel low (vs. high) control; topdog effect among high control participants in |

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| | | | Causal attribution for loss of control | | Study 2, but not Study 1; interaction is mediated by inspiration to cope with loss of control. |
| | | | | | Underdog effect among low-control consumers disappears when participants focus on shopping task (vs. experience) or when low control is attributed to an internal (vs. external) condition. |
| He, You, & Chen, 2020 | Brand biography | Lay theory of achievement | Idealistic self Pragmatic self | WOM intentions WOM engagement | Underdog effect, topdog effect, moderation of underdog effect, process: Underdog (vs. topdog) brand biography leads to higher intentions to engage in WOM, mediated by idealistic self. Topdog (vs. underdog) brand biography leads to higher WOM engagement in terms of actual behavior, mediated by pragmatic self For consumers who hold incremental theory, underdog (vs. topdog) biography led to higher WOM engagement; effect disappeared among consumers who held entity theory |
| Nguyen & Grohmann, 2020 | External disadvantage Passion and determination | - | Narrative transportation Post-message engagement | Purchase intentions | Process: Passion and determination have a direct and indirect effect (through narrative transportation and post-message engagement) on purchase intentions; external disadvantage has only indirect |

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| | | | | | effect (through narrative transportation and post-message engagement). |
| Kim & Park, 2020 | Brand biography | Brand transgression type | Perceived betrayal | Brand evaluations | Underdog effect, moderation of the underdog effect, process: A brand with an underdog (vs. topdog) brand biography is evaluated more negatively in response to an ethical (vs. functional or community-related) brand transgression and this effect is mediated by perceived betrayal |
| Nagar, 2020 | Brand biography | Consumption context | - | Attitude toward a copycat brand | Moderation of the underdog effect (reversal to topdog effect): More favorable attitudes toward a copycat of a brand with an underdog biography when the consumption decision is private (vs. public); attitudes toward a copycat of a brand with a topdog biography is favorable whether the consumption decision is private or public |

Notes: Presentation in chronological order. Articles that refer to the underdog effect outside of the marketing literature (e.g., Chou, 2019; Goldschmied, Galily, & Keith, 2018) or do not relate to brand biography effects (e.g., Dai et al., 2018; Hamby, Brinberg, & Daniloski, 2019; Kao, Wu, & Yu, 2017; McGinnis et al., 2017; Michniewicz & Edelman, 2019; Nariswari & Chen, 2016; Nurmohamed, 2020; Siemens et al., 2020) were omitted for brevity.

Appendix B: Experimental Manipulations

Study 1: Physical Risk

Imagine you read the following information from a reliable source:

Recent research revealed that 1% [23%] of food poisoning incidents reported during the last summer were due to ice cream consumption, which puts ice cream into high-risk food category. The freshness and cleanliness of the ingredients used in the production process are important contributing factors to food poisonings resulting from ice cream consumption.

Study 1: Topdog Brand Biography

Founded by Rosalie Hess, Creamio is a leading, premium ice cream brand. Growing up, Rosalie loved to experiment with ice cream recipes in her parent's well-equipped kitchen, hence developed a strong palate for ice cream. After completing high school, Rosalie studied at a culinary institute to educate herself in ice cream production and its delicacies. She knew that the next step for her was setting up her own ice cream brand. With a financial support of \$100,000 from an international food corporation, Rosalie founded Creamio at a state-of-the-art production facility, and began her quest. Aiming for becoming the market leader, Rosalie crafted her product line. The international food corporation that backed her brand helped her connect with established retailers and convince them to take a chance on her brand. The logistic support of the retailers, combined with her significant marketing and distribution budget, allowed Rosalie to build Creamio without compromising quality at each step of the production. Indeed, the testimony of the food critics who tried her ice cream proved her right. The name of her brand and her ice cream made its way very quickly. Now considered a market leading and trendy brand, Creamio is regarded by food critics to be premium ice cream, offered at gourmet food shops.

Study 1: Underdog Brand Biography

Founded by Rosalie Hess, Creamio is a relatively small and new ice cream brand that has had to compete against longtime powerful competitors. Growing up in a family of limited means, Rosalie loved to experiment with ice cream recipes in her parent's kitchen, which turned into a passion that she decided to pursue in life. After completing public high school, Rosalie worked a day job to barely survive and spent countless nights on educating herself in ice cream production and its delicacies. She knew in her heart that the next step for her was setting up her own ice cream brand. With a personal loan of \$10,000 at her credit union, Rosalie founded Creamio at a production facility converted from a garage and began her quest. Rosalie persevered despite lack of external financial or technical resources, and crafted her product line fueled by her passion. She knew that the established retailers were not going to take a chance on her new brand. Winning these retailers required a large marketing budget and connections, but Rosalie had neither. Through determination and numerous attempts, she persuaded food critics to taste her ice cream. Indeed, the testimony of those who tried her ice cream proved her right. The name of her brand and her ice cream made its way very quickly. Though still relatively less known compared to more powerful competitors, Creamio is regarded by food critics to be an ice cream brand with a bright future.

Study 2: High Performance Risk

Imagine you read the following information from a reliable source:

Recent research revealed that 23% of product failures, product returns, and product recalls reported in the consumer electronics product category in the last year were accounted by speakers, which puts speakers into high performance failure risk category.

Study 2: Topdog Brand Biography

Founded by Stan Walker, SW Audio is a leading, premium audio brand. Growing up, Stan loved to tinker with his family's state-of-the-art stereo equipment, hence developed a strong ear for music and acoustics. After completing high school, Stan got his degree in physics, from MIT, focusing on acoustics and wave mechanics. He knew that the next step for him was setting up his own audio brand. With a financial support of \$100,000 from an international corporation, Stan founded SW Audio at a state-of-the-art production facility, and began his quest. Aiming for becoming the market leader, Stan crafted his product line. The international corporation that backed his brand helped him connect with established retailers and convince them to take a chance on his brand. The logistic support of the retailers, combined with his significant marketing and distribution budget, allowed Stan to build SW Audio without compromising quality at each step of the production. Indeed, the testimony of the critics who tested his speakers proved him right. The name of his brand its way very quickly. Now considered a market leading and trendy brand, SW Audio is regarded by audiophiles to be premium audio brand.

Study 2: Underdog Brand Biography

Founded by Stan Walker, SW Audio is a relatively small and new audio brand that has had to compete against longtime powerful competitors. Growing up in a family of limited means, Stan loved to tinker with the family's only FM radio and it was almost a foregone conclusion that he was destined to a life in pursuit of music and acoustics. After completing public high school, Stan worked a day job to barely survive and spent countless nights online and at the library to educate himself in physics, focusing on acoustics and wave mechanics. He knew in his heart that the next step for him was setting up his own audio brand. With a personal loan of \$10,000 at his credit union, Stan founded SW Audio at a production facility converted from a garage and began his quest. Stan persevered despite lack of external financial or technical resources, and crafted his product line fueled by his passion. He knew that the established retailers were not going to take a chance on his new brand. Winning these retailers required a large marketing budget and connections, but Stan had neither. Through determination and numerous attempts, he persuaded critics to test his speakers. Indeed, the testimony of those who tested his speakers proved him right. The name of his brand made its way very quickly. Though still relatively less known compared to more powerful competitors, SW Audio is regarded by audiophiles to be an audio brand with a bright future.

Appendix C: Measures

Risk Associated with Brand Choice (Campbell & Goodstein, 2001)

How would you evaluate the risk associated with the purchase of ice cream?

- 1 = not at all risky, 7 = very risky
- 1 = not at all concerning, 7 = very concerning
- 1 = not at all worrisome, 7 = very worrisome
- 1 = not at all important, 7 = very important

Trial Intentions (Study 1)

How likely would you be to try [the brand] once it is available in the US?

- 1 = not likely at all, 7 = very likely
- 1 = not probably at all, 7 = very probable

Purchase Intentions (Study 2)

How likely would you be to purchase [the brand]?

- 1 = not likely at all, 7 = very likely
- 1 = not probably at all, 7 = very probable

Narrative Transportation (1 = strongly disagree, 7 = strongly agree; Appel, Gnambs, Richter, & Green, 2015)

1. While reading the story, I had a vivid image of the founder of the brand.
2. While I was reading the story, I could easily picture the events in it taking place.
3. I was mentally involved in the story while reading it.
4. The story affected me emotionally.
5. While reading the story, I wanted to learn how it ended.

Risk Reduction Function of the Brand (1 = strongly disagree, 7 = strongly agree)

1. The brand would be instrumental in reducing the uncertainty that I may have experienced in such a scenario.
2. The brand would be functional in helping me avoid uncertainty regarding the consumption experience.

Underdog Disposition (1 = strongly disagree, 7 = strongly agree; Paharia et al., 2011)

1. I started from a disadvantaged position in meeting my goals compared to my peers.
2. There are more obstacles in the way of me succeeding compared to others.
3. I've had to struggle more than others to get to where I am in my life.
4. It was harder for me to get where I am today compared to others in my position.
5. I've often felt like I'm a minority trying to break in.
6. I feel that the odds are against me in pursuing my goals compared to my peers.
7. I often feel I have to compete with others who have more resources than me.
8. I often feel I have to fight against more discrimination compared to others.
9. Some people are jealous of me because of my privileged background. (r)
10. I always stay determined even when I lose.
11. I show more resilience than others in the face of adversity.
12. Compared to others I am more passionate about my goals.

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13. When others expect me to fail I do not quit.
14. Compared to others, I do not give up easily.
15. Even when I've failed I have not lost my hope.
16. Compared to others my dream is more important to the meaning of my life.
17. I fight harder compared to others to succeed when there are obstacles in my way.
18. When I encounter obstacles I usually quit. (r)

Lay Rationalism (1 = strongly disagree, 7 = strongly agree; Hsee, Yang, Zheng, & Wang, 2015)

1. When making decisions, I like to analyze financial costs and benefits and resist the influence of my feelings.
2. When choosing between two options, one of which makes me feel better and the other better serves the goal I want to achieve, I choose the one that serves my goal.
3. When making decisions, I think about what I want to achieve rather than how I feel.
4. When choosing between two options, one of which is financially superior and the other “feels” better to me, I choose the one that is financially better.
5. When choosing between products, I rely on product specifications rather than on my gut feelings.
6. When making decisions, I focus on objective facts rather than subjective feelings.

Uncertainty Avoidance (1 = strongly disagree, 7 = strongly agree; Jung & Kellaris, 2004)

1. I prefer structured situations to unstructured situations.
2. I prefer specific instructions to broad guidelines.
3. I tend to get anxious easily when I don't know an outcome.
4. I feel stressful when I cannot predict consequences.
5. I would not take risks when an outcome cannot be predicted.
6. I believe that rules should not be broken for mere pragmatic reasons.
7. I don't like ambiguous situations.

Risk Taking Propensity (1 = strongly disagree, 7 = strongly agree; Zhang, Highhouse, & Nye, 2019)

1. Taking risks makes life more fun.
2. My friends would say that I'm a risk taker.
3. I enjoy taking risks in most aspects of my life.
4. I would take a risk even if it meant I might get hurt.
5. Taking risks is an important part of my life.
6. I commonly make risky decisions.
7. I am a believer of taking chances.
8. I am attracted, rather than scared, by risk.