The Underdog Effect: The Marketing of Disadvantage and Determination through Brand Biography

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ABSTRACT

We introduce the concept of an underdog brand biography (UBB) to describe an emerging trend in branding in which firms author a historical account of their humble origins, lack of resources, and determined struggle against the odds. We identify two essential dimensions of an underdog biography: external disadvantage, and passion and determination. We demonstrate that an UBB can increase purchase intentions, real choice, and brand loyalty. We argue that UBBs are effective because consumers react positively when they see the underdog aspects of their own lives being reflected in branded products. Four studies demonstrate that the UBB effect is driven by identity mechanisms: we show that the effect is a) mediated by consumers’ identification with the brand, b) greater for consumers who strongly self-identify as underdogs, c) stronger when consumers are purchasing for themselves vs. others, and d) stronger in cultures in which underdog narratives are part of the national identity.
“We started Nantucket Nectars with only a blender and a dream…” (Nantucket Nectars label)

“Thanks to a never ending campaign by Apple’s powerful public relations machine to protect the myths surrounding the company's origin, almost everyone believes Apple was started in a garage…actually the operation began in a bedroom… when the bedroom became too crowded operations did indeed move to the garage.” (Linzmayer 1991:1)

“I was never the likeliest candidate for this office. We didn't start with much money or many endorsements. Our campaign was not hatched in the halls of Washington — it began in the backyards of Des Moines and the living rooms of Concord and the front porches of Charleston.” (President-Elect Barack Obama’s acceptance speech, November 5, 2008)

Across cultures, contexts, and time periods, underdog narratives have inspired people. Stories about underdogs are pervasive in sports, politics, religion, literature, and film. Both candidates in the 2008 United States presidential election, Barack Obama and John McCain, positioned themselves as underdogs to gain the support of voters, as did presidential primary candidates Hillary Clinton, John Edwards, Mike Huckabee, and Ron Paul. Underdog author J.K. Rowling, a welfare mother who wrote seven of the best-selling books of all time, created a lovable underdog character, Harry Potter, an inexperienced but passionate orphan who grew up in a closet. Television coverage of the 2008 Olympics highlighted underdog aspects of many athletes’ biographies, from swimmer Michael Phelps’ single mother to gymnast Shawn Johnson’s parents taking out a second mortgage on their home to pay for her gymnastics lessons.

In this research we examine how marketers can use underdog narratives to positively affect consumers’ perceptions of brands. Underdog narratives are often delivered to consumers through the rhetorical device of a brand biography, an unfolding story that chronicles the brand’s origins, life experiences, and evolution over time in a selectively constructed story. Many contemporary brand biographies contain underdog narratives which highlight the company’s humble beginnings, hopes and dreams, and noble struggles against adversaries. Nantucket Nectars’ label informs us that they started “with only a blender and a dream,” while brands such as Google, Clif Bar, HP, and Apple profile the humble garages in which they began.

We argue that underdog brand biographies are effective because consumers can relate these stories to their own lives, and we demonstrate that the positive effect of underdog brand biographies is driven by identity mechanisms. Specifically, we show that the underdog effect is a) mediated by a consumer’s identification with the brand, b) greater for consumers who strongly self-identify as underdogs, c) stronger when consumers are purchasing for themselves vs. others, and d) stronger in consumers who are from cultures in which underdog narratives are part of their national identities. These findings suggest that the underdog brand biography is powerful because it appeals to consumers’ identity needs. Consumers react positively when they see underdog aspects of their own lives reflected in branded products.
This article is organized as follows. First, we introduce the concept of an underdog brand biography and explore the emergence and dissemination of underdog narratives in culture. Next, we present a series of hypotheses which propose and explain positive consumer responses to underdog brand biographies. Since underdog narratives are an under-explored topic in consumer research, we then use factor analysis to develop an underdog scale that reveals two main dimensions of an underdog: 1. external disadvantage and 2. passion and determination. Next, four studies examine the effect of using an underdog brand biography on purchase intentions, real choice, and brand loyalty. Study 1 illuminates an underdog main effect, and provides support for a mediating process of identification, and a moderating effect for consumers’ self-reported underdog disposition. Study 2 decomposes the underdog brand biography into its two components (external disadvantage and passion and determination) and shows their individual and joint effects on consumers. Study 3 investigates whether the underdog effect crosses cultural boundaries, and study 4 tests the underdog effect in a real choice context while also demonstrating two other moderators: underdog self-concept salience and the identity relevance of the purchasing situation. We conclude with a discussion of the theoretical and managerial implications of underdog brand biographies and offer ideas for future research.

UNDERDOG BRAND BIOGRAPHIES

Stories about underdogs are pervasive across cultures and throughout history, and appear in ancient religious texts, as well as in modern literature, art, film, and politics. This rhetorical structure applies to many well-known stories: David and Goliath, Lord of the Rings, and Rocky. An underdog is colloquially defined as the one who is disadvantaged and who is, therefore, expected to lose (American Heritage Dictionary 2006). The underdog exists in relation to one who is well endowed with resources and is favored to win, termed a top dog. A review of underdog narratives in the Bible suggests that “the underdog is the poor relative, the youngest son, the exile, the ex-prince, the soldier of a defeated army – the person, in short, who is least likely to succeed.” (Niditch 1987). Niditch’s analysis further indicates that underdogs do not let their disadvantaged position hold them back from competition. Underdogs compete with fewer privileges and resources such as strength, size, weaponry, or money, but with determination and perseverance in the face of obstacles.

One way consumers can infer the underdog status of a brand is by observing a firm’s resources or market position compared to its competitors. Hoch and Deighton (1989) classify brands as underdogs (top dogs) based on their weak (dominant) market standing, defined as market share, compared to other brands in their category. Classic underdog brands are the Chicago Cubs (vs. the New York Yankees), the Jamaican bobsled team (vs. teams from Norway, Canada, and the United States); Apple (vs. Microsoft), and Southwest Airlines (vs. American or United Airlines). In contrast, a top dog brand is often a large brand that dominates small or local players, such as Wal-Mart driving local mom-and-pop stores out of business. Brands which embody the weak side of dichotomies such as local (versus national) and independent (versus part of a corporate conglomerate) are often perceived as underdogs. Local independent music bands are
underdogs compared to bands signed by major labels. Local coffee shops are underdogs to Starbucks, and public schools are underdogs in relation to private schools.

However, in today’s marketplace, many marketers do not rely on consumers to infer their brands’ underdog status, but, instead, author their own underdog narratives. Product packaging, corporate websites and blogs, and marketing communications tell the biographical stories of brands. These “brand biographies” use personal narrative to provide a historical account of the events that have shaped the brand, chronicling its origins, life experiences, and evolution. Brand biographies can invoke a range of consumer values, such as authenticity, artisanship, and heritage. In this research, we focus on a specific type of brand biography that has become increasingly popular on store shelves, the underdog brand biography. These biographies tell stories about entrepreneurs of humble origins who struggle against the odds to build their brands and businesses through sheer will and determination, despite lacking the resources of their well-endowed competitors. Underdog brand biographies are being used by both large and small companies and across categories including food and beverages, technology, airlines, and automobiles. Even large corporations, such as Google and Apple, are careful to retain their underdog beginnings in their brand biographies. Being an underdog brand can be a matter of consumer perception rather than a market reality.

The prevalence of underdog stories in today’s marketing environment is an intriguing phenomenon. Prior research finds that people want to associate themselves with winners and disassociate themselves from losers, which suggests consumers should prefer top dog brands, since top dogs are more likely to win. Cialdini’s work on self-presentation by association finds a “basking in reflected glory” effect (Cialdini et al. 1976; Cialdini and Richardson 1980; Cialdini and De Nicholas 1989) in which people strategically manage the strength of association between themselves and brands in order to align themselves with winners. For example, students were more likely to wear branded apparel displaying their university’s logo following a football victory than a loss (Cialdini et al. 1976). Similarly, Cialdini and Richardson (1980) found that participants do not want to identify with losing sports teams, or “cutting off reflected failure.” The implication of this literature for our study is that people distance themselves from underdog brands to avoid being associated with the one expected to lose and associate themselves with top dog brands to bask in the reflected glory of probable winners. From a consumer demand perspective, logic also suggests that businesses with abundant resources signal to consumers they are more able to deliver quality products, whereas businesses with fewer resources do not have the means to deliver the best.

By contrast, we propose that consumers identify with underdog brand biographies because of underdog aspects of their own lives. Although we would all like to approach every competition in life with sufficient resources and advantages, life often does not grant us that luxury. Most people have felt disadvantaged at one time or another. Therefore, we propose that underdog brand biographies are effective in the marketplace because consumers identify with the disadvantaged position of the underdog and share their passion and determination to succeed when the odds are against them. To test our assumption, we ran a pilot study with 108 participants from a national online sample and found that, on average, people perceive themselves to be greater underdogs than they perceive their friends, members of their ethnic group, people in their social class, and
people from their country of origin. A summary of the pilot study is contained in an online appendix which accompanies this article (see online appendix A). We therefore propose that consumers self-identify with underdogs and, therefore self-identify with underdog brands. Brands positioned as underdogs can gain favor with consumers through a process of consumer-brand identification.

Past research has shown that people choose and use possessions and brands that reflect their actual and/or desired identities (as reviewed in Kassarjian 1971; Sirgy 1982; Dittmar 1992). The self-congruity hypothesis claims that people desire and choose brands that reflect their actual or desired self-concepts and avoid brands which are incongruent with who they are and/or would like to be (Gardner and Levy 1955; Levy 1959; Kassarjian 1971; Sirgy 1982). Self-brand connection is a core construct in consumer behavior which has been conceptualized as a key antecedent of consumer-brand relationship strength (Fournier 1998; Aaker, Fournier, and Brasel 2004) making it an important driver of downstream brand attitudes and behaviors (Escalas 2004). It has also been linked to brand equity (Escalas and Bettman 2003). Given these findings, it is likely that the more people perceive themselves as underdogs, the more they will have an affinity for underdog brands. This leads to the following hypotheses:

**H1**: Consumers will show higher brand preference and purchase intentions for brands with an underdog biography.

**H2**: Increased preference and purchase intentions for brands with underdog biographies will be mediated by consumer identification with the brand.

**H3**: The more consumers self-identify as underdogs, the more likely they will prefer brands with underdog brand biographies.

To support consumer-brand identification as a mediating process we include several identity-related moderators in our studies. In addition to exploring individual differences in consumers’ tendencies to view themselves as underdogs (underdog disposition), we examine the effect of priming consumers by making their underdog self-concepts more salient. We also examine the underdog effect in purchase situations in which consumers are purchasing for themselves versus others, and measure consumers’ responses to underdog brands in a cross cultural setting to test whether consumers in a culture founded on underdog narratives prefer underdog brands to a greater extent than those in cultures where underdog narratives are less historically significant.

**RESEARCH DESIGN AND FINDINGS**

**Construct Development: The Underdog Biography**

Because the underdog narrative is an under-explored topic in consumer research, we began our research by discovering the dimensions of an underdog narrative in order to better define and test the construct of an underdog brand biography. Open-ended item
generation, exploratory and confirmatory factor analyses, reliability assessment, and scale validation were performed with five samples comprising a total of 1,400 participants recruited from both a university lab and national online panels. The scale development procedure is summarized in an online appendix which accompanies this article (see online appendix B). These analyses resulted in a 2 factor, 18 item scale that behaved consistently across the samples and possessed sufficient reliability. The two factors defining an underdog that emerged were: 1. external disadvantage, and 2. passion and determination. External disadvantage is summarized by nine items (α = .85), which include relatively high obstacles and fewer resources, and passion and determination is summarized by nine items (α = .78), which include resilience, perseverance, and passion for a dream. The scale’s reverse coded items are marked with an “R” in parentheses (see figure 1).

The two factors defining the underdog narrative can be configured to yield four cells in a 2 x 2 matrix, also contained in figure 1. A true “underdog” rates high on both factors and a true “top dog” rates low on both factors. Loading high on one factor, but not the other yields either a “victim” (high external disadvantage, low passion and determination) or a “privileged achiever” (low external disadvantage, high passion and determination).

Scale Validation. A number of measures were included for preliminary validity checks. Participants who rated themselves as underdogs were significantly more likely to indicate that they felt that they have (or will) overcome the odds and “pulled themselves up from their bootstraps.” Additionally, sixty-nine participants were recruited to participate in a series of unrelated studies to confirm the validity of the underdog scale. We examined the ratings of characters that represent prototypes for each of the four categories (underdog, privileged achiever, victim, and top dog). For underdog, we chose Rocky Balboa and Harry Potter; for privileged achiever, Donald Trump; for victim, a homeless man, and for top dog, Paris Hilton. Participants were asked to indicate their agreement as to whether the 18 underdog items appropriately described the five characters using seven-point Likert scales. Each participant answered questions for two of the characters in a random set order to yield a total of 138 ratings. The underdog scale was adapted for a third person usage; for example, participants were asked how much they agreed or disagreed with statements referring to Donald Trump “compared to others he is more passionate about his goals.”

As expected, these characters mapped well onto the predicted category by either scoring above or below the midpoint on a 1-7 scale. The two underdog characters scored above the midpoint on external disadvantage (Rocky M = 4.70, t(27) = 2.73, p < .002, Harry Potter M = 5.09, t(27) = 6.65, p < .001) and on passion and determination (Rocky M = 5.67, t(27) = 9.53, p < .001, Harry Potter M = 5.63, t(27) = 11.6, p < .001). The top dog character, Paris Hilton, scored below the midpoint for both external disadvantage (M = 1.79, t(26) = 13.53, p < .001) and passion and determination (M = 3.08, t(26) = 6.60, p < .001). The privileged achiever, Donald Trump scored below the midpoint on external disadvantage (M = 2.84, t(26) = 6.58, p < .001) and above the midpoint on passion and
determination (\(M = 5.0, t(26) = 5.23, p < .001\)). Finally the victim, the homeless man, scored above the midpoint on external disadvantage (\(M = 4.68, t(27) = 4.88, p < .001\)) and below the midpoint on passion and determination (\(M = 2.87, t(27) = 4.88, p < .001\)). Thus, the results from this study confirm the validity of our scale. Known underdogs such as Rocky Balboa and Harry Potter are appropriately rated as underdogs on our scale. Donald Trump, Paris Hilton, and the homeless person were also correctly matched into their predicted quadrants.

In summary, we have identified two main dimensions of the underdog narrative: 1. external disadvantage, and 2. passion and determination, and have used these factors and their underlying items to develop a parsimonious and reliable 18-item underdog scale that we use in our studies. This analysis deepens our understanding of the underdog narrative and shows it is more complex than being the one “expected to lose.” The underdog narrative not only highlights one’s disadvantaged position, but also celebrates passion and determination to overcome those circumstances. At the same time, this analysis deepens our understanding of top dogs, showing that top dogs can either rest on their laurels and rely on their privileged situation (true top dog) or use their resources and dominant position to gain more power and accomplishments (privileged achiever).

**Study 1: The Underdog Effect and the Mediating Role of Consumer-Brand Identification**

Study 1 was designed to show an underdog main effect, how firms can increase positive attitudes and purchase interest for their brands through the use of underdog brand biographies, and to show how these positive brand outcomes are mediated by a process of consumer-brand identification. Consistent with hypothesis 1, we predict increased purchase intentions for brands with underdog brand biographies (versus top dog biographies) and predict that this underdog effect will be mediated through a process of identification consistent with hypothesis 2. In addition to showing the mediating process of identification, we demonstrate that the underdog effect will be moderated by consumers’ self-reported underdog disposition, and will be stronger for consumers with high underdog dispositions consistent with hypothesis 3.

**Procedure.** A national sample of 181 participants completed a group of unrelated online surveys. Participants were randomly assigned to one of two brand biography conditions where a hypothetical “company A” was given either an underdog brand biography containing external disadvantage and passion and determination, or a top dog brand biography containing explicit external advantage and implicitly lower passion and determination. When the company was portrayed as an underdog, participants were told “the founders of company A started in a garage with very few resources, but had a dream and struggled to succeed. They overcame the odds to bring their products to market.” In the top dog condition, participants were told that “the founders of company A came from the industry, were well resourced, and were favored to succeed in the market.” To control for potential effects associated with company size, in both conditions participants were told that the company was relatively small in its industry with a small market share and sales of less than $1 million per year. Both narratives were tested for their level of passion and determination and external disadvantage. In a separate sample
130 participants read both the top dog and underdog brand biographies and were asked “Which biography has more passion and determination?” and “Which biography has more external disadvantage?” Participants more often chose the underdog brand biography to have more external disadvantage (84%, \( p < .001 \)) and more passion and determination (98%, \( p < .001 \)) than the top dog biography. After reading the narratives about the company, all subjects answered questions about their attitudes towards the company and their purchase intentions. Specifically, participants were asked “How much do you identify with company A?” and “How much do you like company A?” Both questions were asked on a 1 to 7 scale anchored at 1 (not at all) and 7 (very much). Participants were then asked questions about their intent to purchase the products of the company. Purchase intention was measured by a within-subjects index of six questions in different product categories. Participants were asked to imagine that Company A was a company from a specific category. For example, participants were first asked “Imagine that Company A is a music label that promotes a particular music genre. How likely would you purchase a product from company A?” Participants were asked the same question for five additional product categories including detergent, a hair salon, dish soap, jackets, and bike lights. To examine the moderating role of individual differences relating to underdog disposition, all participants completed an additional survey which asked them to use the 18-item underdog scale to rate themselves.

Results. The six purchase intention items were collapsed into a single index with a Cronbach’s alpha of .90 and total purchase intention was calculated as an average of purchase interest across the six categories. The 18-item underdog scale was averaged into one underdog disposition index. We ran a series of regressions to assess the main effect of brand biography, the moderating effect of underdog disposition, and the mediating effect of identification on purchase intention. In a linear regression, identification with the brand was regressed on the biography manipulation (dummy coded 1 = underdog, 0 = top dog), underdog disposition, and the interaction between the biography manipulation and underdog disposition. The variables forming the interaction were centered for ease of interpretation. The final model was significant \( (R^2 = .15, F(3, 177) = 10.72, p < .001, \text{see table 1, equation 2}) \), and there were significant overall effects of the biography manipulation \( (B = .89, t(177) = 3.95, p < .001) \) on identification. Participants identified with the company significantly more when it had an underdog biography than with a top dog biography \( (M = 5.1, M = 4.1) \). There was no significant effect of underdog disposition on identification \( (B = -.04, t(177) = -.18, NS) \); however, as expected, there was a significant interaction between biography manipulation and underdog disposition \( (B = .81, t(177) = 2.82, p = .005) \). The model revealed there was a significant positive effect between underdog disposition and identification in the underdog condition \( (B = .77, t(177) = 3.99, p < .001) \); however, there was no significant effect in the top dog condition \( (B = -.04, t(177) = .18, NS) \).

Similar results were found for purchase intention: there was a significant overall effect for the biography manipulation, no significant effect for underdog disposition, and a significant interaction between the biography manipulation and underdog disposition (see table 1, equation 1). The model yielded a significant positive effect between underdog disposition and purchase intentions in the underdog condition \( (B = .39, t(177) = 2.7, p < .01) \); however, there was no significant effect in the top dog condition \( (B = -.06, \text{NS}) \).
We then tested for mediated moderation \cite{Muller2005}. A mediated moderation would show that a participant’s underdog disposition moderates the effect of an underdog brand biography on purchase intentions, and that identification mediates this whole process. To test for a mediated moderation we again regressed purchase intentions on the biography manipulation ($X$), underdog disposition ($Mo$), and an interaction term between the two ($XMo$), in addition to including the mediator of identification ($Me$), and an interaction term between identification and underdog disposition ($MeMo$). The final model was significant ($R^2 = .36, F(5, 175) = 20.0, p < .001$, see table 1, equation 3), and we found that all conditions for a mediated moderation were satisfied. That is, the effects of an underdog brand biography on the mediator of identification depended on the moderator of the consumer’s underdog disposition.

\begin{table}[h]
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\caption{Table 1: \textit{Insert table 1 about here}}
\end{table}

\textit{Discussion.} As predicted, we found that participants had more favorable evaluations of a company when it had an underdog brand biography than when it had a top dog brand biography, supporting hypothesis 1. We also confirmed that purchase intentions increased through a mediating process of identification, supporting hypothesis 2. Furthermore, we found that consumers with higher underdog dispositions demonstrated stronger underdog effects than those with lower underdog dispositions, consistent with hypothesis 3, providing additional support for the role of consumer-brand identification. These results suggest that identification is a strong contributor to the underdog effect.

\textbf{Study 2: Deconstructing the Underdog Brand Biography into Two Dimensions}

In study 2 we wanted to understand the individual contributions of the two dimensions of an underdog brand biography, external disadvantage and passion and determination, to determine whether the underdog effect was driven by one of the dimensions or by their combination. While we believe that both external disadvantage and passion and determination are admirable traits for a brand to possess, we hypothesize in H1 that it is their combination which yields an underdog narrative, as evidenced in our scale development, and thus contributes to the underdog effect uncovered in study 1. To this end, we tested all four of the brand biographies that make up the four quadrants yielded by our underdog scale (victim, privileged achiever, underdog, and top dog), varying both external disadvantage (low/high) and passion and determination (low/high) across condition. In a between-subjects design, participants read about the brand biographies of four different companies corresponding to the four quadrants of our underdog scales matrix from figure 1. Unlike study 1, we made the presence of or lack of passion and determination explicit in all conditions. Also, to ensure construct validity, in this study we used multi-item scales to measure identification and purchase interest.

\textit{Procedure.} A national sample of 222 participants completed a group of unrelated online surveys. Participants were randomly assigned to one of four brand biography
conditions where “company ABC” was either given a victim, underdog, top dog, or privileged achiever brand biography (see appendix A for full biographies).

Participants then answered a series of questions on purchase intention asked on 1-7 scales as follows: “Based on the description of this company, would you like to try this brand?” anchored at 1 with not at all and 7 with very much; “Would you buy this brand if you happened to see it in a store?”; “Would you actively seek out this brand in a store in order to purchase it?”; and “How likely would you be to purchase a product made by this brand?” The latter three questions were anchored at 1 not likely to 7 very likely. Participants were then asked questions on brand interest as follows: “Please indicate how much you agree with the following statement: I am eager to check out this brand because of the story about its founders,” which was anchored at 1 disagree to 7 agree; “If this brand succeeds I will be _____,” which was anchored at 1 with sad and 7 with happy and “How loyal would you be to this brand?” anchored at 1 with not loyal and 7 with very loyal. Participants were also given the 7-item self-brand connection scale (Escalas 2004) to measure identification with the brand. Manipulation check questions were asked: “How passionate and determined is this brand?” and “How externally disadvantaged is this brand?” both anchored at 1 not at all to 7 very much.

**Results.** The four purchase intention items and three brand interest items were collapsed into a single purchase interest index with a Cronbach’s alpha of .94. The seven-item self-brand connection scale was collapsed into one index with a Cronbach’s alpha of .96. Manipulation checks on external disadvantage and passion and determination items yielded results in the predicted direction. We found that participants rated the underdog brand biography to be significantly more externally disadvantaged than the top dog (4.14 vs. 3.10, t(121) = 3.85, p < .001) or privileged achiever brand biographies (4.14 vs. 2.91, t(115) = 4.38, p < .001). In addition, participants rated the victim brand biography to be significantly more externally disadvantaged than the top dog (4.34 vs. 3.1, t(103) = 4.48, p < .001) or privileged achiever brand biographies (4.34 vs. 2.91, t(97) = 5.0, p < .001). Participants also rated the underdog biography to have significantly more passion and determination than the top dog (4.89 vs. 4.08, t(121) = 2.65, p < .01) or victim brand biographies (4.89 vs. 3.77, t(128) = 3.79, p < .001). Finally, participants rated the privileged achiever biography to have significantly more passion and determination than the top dog (5.51 vs. 4.08, t(90) = 4.22, p < .001) or victim brand biographies (5.51 vs. 3.77, t(97) = 5.23, p < .001).

We then tested each individual dimension (external disadvantage vs. passion and determination) as separate independent variables to explore how both factors work together to drive the underdog effect. Ratings of self-brand connection were analyzed using a two way between-subjects ANOVA with external disadvantage and passion and determination as the two independent factors. The overall model was significant (F(3, 218) = 5.45, p = .001). The analysis revealed a significant main effect for external disadvantage (F(3, 218) = 8.21, p = .005), no significant effect for passion and determination (F(3, 218) = 1.1, NS), and a significant interaction between external disadvantage and passion and determination (F(3, 218) = 4.91, p < .03). These results support H1, showing a positive interaction between external disadvantage and passion and determination, the two components of an underdog brand biography. Analyzing the simple effects, in the low disadvantage conditions (top dog and privileged achiever)
having passion and determination did not matter (2.78 vs. 2.54, \( t(90) = .8, \) \( t \) NS). However, in the high disadvantage conditions (victim and underdog) having passion and determination made a significant difference (2.92 vs. 3.57, \( t(128) = 2.5, p < .02 \)), as reflected in the interaction results.

Ratings of purchase intention were analyzed using a two-way between-subjects ANOVA with external disadvantage and passion and determination as the two independent factors. The overall model was significant \( (F(3, 218) = 3.43, p < .02) \). The analysis revealed a marginally significant main effect for external disadvantage \( (F(3, 218) = 2.84, p < .10) \), no significant effect for passion and determination \( (F(3, 218) = 2.0, \) NS), and a marginally significant interaction between external disadvantage and passion and determination \( (F(3, 218) = 3.6, p < .06) \). Analyzing the simple effects, in the low disadvantage conditions (top dog and privileged achiever), having passion and determination did not matter (3.81 vs. 3.73, \( t(90) = .32, \) NS). However, in the high disadvantage conditions (victim and underdog), having passion and determination made a significant difference (3.78 vs. 4.39, \( t(128) = 2.6, p < .02 \)).

Finally, as in study 1, we tested whether self-brand connection mediated the underdog effect, following the procedures outlined by Baron and Kenny (1986). First, we regressed the mediator (self-brand connection) on the independent variable (brand biography, the interaction term of external disadvantage and passion and determination). Results showed a significant positive relationship between brand biography and self-brand connection \( (F(1,220) = 14.8, p < .001; \beta = .251, p < .001) \). Second, we regressed the dependent variable (purchase intention) on the independent variable (brand biography). Results showed a significant positive relationship between brand biography and purchase intention \( (F(1,220) = 10.3, p < .01; \beta = .211, p < .001) \). Third, we regressed the dependent variable (purchase intention) on both the independent variable (brand biography) and on the mediator (consumer-brand identification). Results showed a significant positive relationship between self-brand connection and purchase intention \( (F(2, 219) = 135.5, p < .001; \beta = .737, p < .001) \), but the relationship between brand biography and purchase intention was no longer significant when the mediator was present \( (\beta = .026, \) NS). This pattern of results illustrates a mediated moderation where self-brand connection mediates the relationship between brand biography and purchase intentions, supporting H2.

Discussion. In study 2, we showed that having both external disadvantage and passion and determination present in a brand biography is a powerful combination that produces the highest level of self-brand connection and purchase interest, supporting H1. We find that 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. Again, as in study 1, we showed that the underdog effect is mediated by the consumer’s perceived self-brand connection.
In an additional study, reported in the online appendix C, we run a similar experiment with four brand biographies which tests whether mood and authenticity perceptions contribute to the underdog effect. Our results suggest that even when controlling for mood and authenticity, identification with an underdog brand remains a strong predictor of purchase interest.

Study 3: Cultural Identity as a Moderator of the Underdog Effect

While the previous two studies show that underdog brand biographies are compelling to consumers, both studies were conducted with U.S. subjects. In study 3, we compare students from an Asian country, Singapore, with U.S. students on their attitudes towards underdog brands and top dog brands. We predict that the underdog effect will be stronger in cultures which are more individualist, and particularly where underdog narratives have been part of the fabric of national identity.

A considerable literature in cross-cultural psychology has looked at differences between U.S. Americans and East Asians with respect to attitudes, personalities and the “self.” Americans tend to be more individualist and less collectivist than inhabitants of other countries (Triandis et al. 1988; Triandis 1989; Triandis, McCusker, and Hui 1990; Markus and Kitayama 1991; Triandis 1995). Americans exhibit more of an internal “locus of control” (Heine 2001) while Asians experience lower feelings of personal autonomy and control over life outcomes (Sastry and Ross 1998). To Americans, achievement is about pushing oneself towards success ahead of others, while to Asians, it is more focused on fulfilling societal expectations (Markus and Kitayama 1991). A meta-analysis of this extensive literature by Oyserman and her colleagues (2002) finds support for higher levels of individualism among European-Americans, and some support for their lower levels of collectivism. In country-specific results, Singaporeans are found to be less individualistic than Americans, although not more collectivist. Furthermore, American culture is almost reverential toward hard work and cultural icons whose own efforts lift them from poverty (Heine 2001). Achieved status earned through personal effort and achievement (Linton 1936) is more prevalent in American culture, while ascribed status, that is, status obtained through one’s identity, social position, or family heritage (Linton 1936), is more prevalent in Asian cultures.

We hypothesize that Americans are more receptive to underdog narratives than people from other cultures because of the unique role of underdogs in the history of the United States. The “American Dream,” the fabled American myth, is built on the stories of underdogs who came to the United States with virtually nothing and pulled themselves up from their bootstraps to achieve success and gain material comforts (Adams 1931). Tocqueville notes that “Americans owe nothing to any man; they expect nothing from any man; they acquire the habit of always considering themselves as standing alone, and are apt to imagine that their whole destiny is in their own hands.” (Tocqueville 1835/1985:104-105). American culture, laws, and social norms enable and encourage underdogs to prosper, in contrast to other nations where an individual’s passion and determination may do little to combat rigid class or caste structures which favor the status-endowed. Adams (1931) describes the American Dream as an opportunity for
every man to achieve, regardless of the circumstances of birth or advantaged social position:

“The American dream is that dream of a land in which life should be better and richer and fuller for every man, with opportunity for each according to ability or achievement…It is…a dream of social order in which each man and each woman shall be able to attain to the fullest stature of which they are innately capable, and be recognized by others for what they are, regardless of the fortuitous circumstances of birth or position.”

This worldview allows underdog narratives to be particularly compelling and credible to Americans. The alternative, interdependent self-construal predominant in Asian cultures may make underdog narratives less believable. For these reasons, underdog brand biographies may be more compelling for American participants than for Asian participants. Therefore, we predict that American students will demonstrate stronger self-brand connection with and will have higher purchase intentions for underdog brands than Singaporean students. We do not predict that students will differ in their identification with or purchase intention for top dog brands, given the universal appeal of winners theorized by Cialdini.

Procedure. Two samples were recruited for this cross cultural research study. A sample of 92 college students was recruited from a major university in Singapore. A similar group of 90 American college students was recruited online from a national sample. In a between-subjects design, each group either read an underdog brand biography or a top dog brand biography (see appendix A for biographies). Participants then answered the same series of seven purchase interest questions and answered the seven questions from the self-brand connection scale, both from study 2.

Results. The seven purchase interest items were collapsed into a single purchase interest index with a Cronbach’s alpha of .96 for Americans, and .90 for Singaporeans. The seven item self-brand connection scale was collapsed into one index with a Cronbach’s alpha of .98, for Americans and .95 for Singaporeans. Ratings of self-brand connection were analyzed using a two way between-subjects ANOVA with brand biography and country as the two independent factors. The overall model was significant \(F(3, 178) = 17.12, p < .001\). The analysis revealed a significant main effect for biography \(F(3, 178) = 43.59, p < .001\), no significant country effect \(F(3, 178) = 1.5, NS\), and a significant interaction between biography and country \(F(3, 178) = 3.93, p < .05\). We ran a priori contrasts to test the effects of country within the underdog condition and the top dog condition respectively. We found that in the underdog condition, the American participants showed a higher self-brand connection with the brand than the Singaporean participants did \(4.05, vs. 3.36, t(178) = 2.28, p < .05\); however, there was no significant difference in self-brand connection with the top dog brand \(2.2 vs. 2.37, t(178) = .59, NS\).

Similar effects were found for purchase interest. Ratings of purchase interest were analyzed using a two way between-subjects ANOVA with brand biography and country as the two independent factors. The overall model was significant \(F(3, 178) = 19.78, p < .001\). The analysis revealed a significant main effect for biography \(F(3, 178) = 50.66, p\)
< .001), no significant country effect ($F(3, 178) = 1.18, NS$), and a significant interaction between biography and country ($F(3, 178) = 5.16, p < .03$). We ran a priori contrasts to test the effects of country within the underdog condition and the top dog condition respectively. We found that in the underdog condition, the American participants showed a higher purchase interest for the brand than the Singaporean participants (4.52 vs. 3.91, $t(178) = 2.39, p < .05$); however, there was no significant difference for the top dog brand (2.81 vs. 3.02, $t(178) = .41, NS$). Additionally, a mediated moderation analysis (Muller, Judd, and Yzerbyt 2005) indicated self-brand connection fully mediated the effect of brand biography on purchase intentions, when nationality was included as a moderator (see appendix B for mediated moderation analysis).

Discussion. All participants showed higher purchase interest for brands with underdog brand biographies than brands with top dog biographies, illustrating the cross cultural appeal of underdog brand biographies. However, as predicted, the underdog effect was significantly greater for American students than for Singaporean students. We found no difference between the two groups of students in purchase interest for top dog biographies. Study 3 suggests that the underdog effect differs with country-level cultural values that partially determine the identities of the residents of that culture.

Study 4: The Underdog Effect in Real Choice Situations

In study 4, we demonstrate the underdog main effect in a real choice context by offering participants the option of two similar brands of chocolate: one with an underdog brand biography and the other with a top dog brand biography. Moreover, rather than looking at consumers’ underdog dispositions as enduring psychological traits possessed strongly by some consumers and not as strongly by others, in study 4 we test the effect of making consumers’ underdog self-concepts more salient through a priming task. This allows us to measure the moderating effect of the consumer’s underdog disposition as a psychological state, rather than as a psychological trait as measured in study 1.

Study 4 also varied the identity relevance of the purchase situation as another identity-related moderator. Participants were told that the chocolate they were choosing was either for oneself (higher self-identity relevance), or for others (lower self-identity relevance). We predict self-brand identification will be more important to purchase interest when the participant was buying for him or herself, than when the chocolate was being purchased for someone else. Gift giving is broadly characterized by givers choosing gifts that represent the identities of both the giver and the recipient, and researchers have shown that givers often choose gifts that reflect their impressions of the recipient’s identity (Belk 1979). However, the literature on self-gifts shows that when buying for themselves, people tend to purchase items that are more personally symbolic and indicative of the self-concept (Mick and Demoss 1990). Given that people view themselves more as underdogs than they view their friends and members of the community, purchases made for others should be less affected by the underdog effect.

Given this, we predict that consumers who are primed to elicit their underdog self-concepts will be more likely to choose brands with underdog brand biographies, but only when they are purchasing for themselves. When purchasing for others, self-brand
connection will be a less important driver of purchase intention; therefore, the underdog effect will be less potent.

In this study, participants read the brand biographies of the Scharffen Berger and Dagoba brands of chocolate. Both brands are relatively small, new, and high-quality artisanal brands of chocolate that were recently bought by the Hershey Corporation. Underdog or top dog components of each brand’s biography were highlighted and were general enough to be used interchangeably (Scharffen Berger as underdog and Dagoba as top dog and vice versa). Before reading the brands’ biographies, participants were primed with either an underdog self-concept or a control self-concept by reading about the plots of movies, and then were either asked about buying chocolate for themselves (high self-identity relevance) or as a gift for a friend (low self-identity relevance).

Procedure. 203 student participants were recruited to participate in series of unrelated studies. In a two by two between subjects design, participants were randomly assigned to a priming condition (underdog state vs. control state) and a purchase situation condition (self purchase vs. gift). In order to control for specific brand effects, we counterbalanced which brand was portrayed as the underdog between conditions (Scharffen Berger or Dagoba). In the priming task, participants were asked to read short summaries of movie plots and then guess the title of the film (as a clue, participants were given the first letter of the movie name); in addition, all participants were shown the movie posters and asked to match the movie summaries with the posters. In the underdog prime condition, participants read summaries about four movies portraying classic underdog stories in a variety of contexts (Rocky, Rudy, G.I. Jane, and Lord of the Rings). In the control condition, participants were given the same task, but were given movies not related to underdog stories (Eternal Sunshine of the Spotless Mind, Wedding Crashers, Zoolander, and Groundhog Day). A pretest with 265 participants confirmed that movie plots in the underdog priming condition were rated to have stronger underdog themes than movie plots in the control priming condition (5.63 vs. 3.96, \( t(264) = 9.3, p < .001 \)). After the movie priming task participants were given a seemingly unrelated survey about buying chocolates. In the self purchase condition, participants read “Imagine you [feel like having chocolate yourself]. At the store you have a choice between two brands of chocolate. Please read carefully the short descriptions of the two chocolate brands and answer the questions that follow. Dagoba and Scharffen Berger are two brands of premium chocolate that you could buy [for yourself.]” In the gift condition the text in the first set of brackets was replaced with “are buying chocolate as a gift for a friend,” and the text in the second set of brackets was replaced with “for a friend as a gift.” Participants then read the brand biographies of both the Scharffen Berger and Dagoba brands of chocolate. In the top dog Scharffen Berger counterbalanced condition participants read the biography of Scharffen Berger as a top dog, and Dagoba as an underdog. In the underdog Scharffen Berger counterbalanced condition participants read about Scharffen Berger as an underdog and Dagoba as a top dog (see appendix A).

After reading the brand biographies of Scharffen Berger and Dagoba, participants were asked “At the end of this session you will be given a Dagoba or Scharffen Berger chocolate that would be convenient for you to have for yourself [give to a friend as a gift]. You may only choose one brand. You will receive the chocolate as you check out. Which chocolate do you want?”
Results. An open ended demand check indicated that none of the participants suspected the movie task was supposed to influence their chocolate choice. A manipulation check was administered at the end of the survey after participants made their choice where participants were asked “Which brand is more of an underdog?” Both brands were rated as significantly more of an underdog in the underdog conditions than in the top dog conditions (6.5 vs. 1.6, t(201) = 30.0, p < .001).

To examine whether the counterbalanced conditions could be merged, we ran a chi square analysis and found no significant difference in how often participants chose the underdog brand when Dagoba was the underdog brand (69%), or when Scharffen Berger was the underdog brand (73%) (z = .31, NS). The two conditions were subsequently collapsed into one item measuring whether participants chose the underdog brand or the top dog brand. There was a significant overall main effect for choosing the underdog brand (z = 70.9%, p < .001). A logistic regression analysis was performed using choice of the underdog brand as the outcome variable and the priming condition (underdog vs. control) and purchase situation (purchasing for self or for someone else), and their interaction as predictors. There was good model fit (χ² (3) = 12.2, p < .01, Nagelkerke R² = .084), indicating successful discrimination between purchasers of the underdog versus the top dog brand based on the three predictors. The purchasing situation significantly predicted choosing the underdog brand; participants were more likely to choose the underdog brand in the self purchase condition than in the gift condition (Wald = 8.69, p = .003, Exp (B) = 1.67). The main effect of the underdog priming was not significant (Wald = 2.26, NS). However, the interaction of underdog priming and identity relevance of the purchasing situation was marginally significant (Wald = 2.82, p = .09, Exp(B) = 1.34). We analyzed the simple effects of priming within the self purchase condition and the gift conditions separately. The first analysis (χ² (1) = 4.18, p < .05, Nagelkerke R² = .07) showed that participants were significantly more likely to choose the underdog brand when they were primed with an underdog self-concept than when they were given the control prime in the self purchase condition (Wald = 3.79, p = .05, Exp (B) = 1.74). On the other hand, the second analysis (χ² (1) = 0.02, NS) showed that in the gift condition there was no significant difference between the underdog prime condition and the control prime condition (Wald = .02, NS).

Discussion. Study 4 replicated the underdog main effect found in studies 1-3 in a real choice context. Participants were more likely to choose the chocolate brand with an underdog brand biography, and this effect was stronger when they were buying the chocolate for themselves, showing that the underdog effect is stronger in more identity-relevant situations. The lack of a main effect for the underdog priming condition may reflect the fact that most people already feel like an underdog compared to others, as suggested by our pilot test, so an underdog self-concept is naturally salient in most respondents, even those not primed with underdog movie plots. However, the significant interaction between the two moderators suggest that priming an underdog identity drives real choice of underdog brands, but only when the purchase is being made for oneself. There was no effect of underdog self-concept priming when the chocolate was purchased...
for someone else. These results are a stronger confirmation of how underdog brand biographies play out in the context of a real consumer choice.

GENERAL DISCUSSION

Today’s grocery store shelves and brand websites are filled with stories of humble beginnings and noble struggles against overpowering adversaries, providing underdog identity narratives for consumers. Despite the fact that these narratives are common in classic and contemporary culture, this phenomenon has yet to receive significant attention in the consumer behavior literature. In this research, we explored how underdog narratives can be transferred to commercial settings where they are often delivered to consumers via the rhetorical device of a brand biography. In a series of studies we show that the use of underdog brand biographies can have a positive impact on consumers’ purchase intentions and actual choices. This positive effect occurs because consumers identify with underdogs and thus, with underdog brands. We also show that an underdog brand biography has two underlying dimensions, external disadvantage and passion and determination, which jointly contribute to the positive underdog effect. Underdogs are therefore defined by both their personal characteristics and the external situation in which they find themselves. This more nuanced conceptualization of underdog brand biographies can help companies refine their existing underdog narratives to include both external disadvantage and passion and determination themes.

Strategic use of underdog brand biographies can be seen in the marketplace today. In an effort to reverse declining sales, Starbucks launched a Pike’s Place blend which emphasized the brand’s humble Seattle coffee culture beginnings, using the name of their original store location as the title for the blend. Snapple, another brand which forged its initial popularity with underdog narratives but then lost credibility with consumers when it was purchased by corporate giant Quaker Oats, similarly “got its juice back” (Deighton 2002). It reintroduced stories about its quirky founders and its underdog spokesperson, Wendy. In the case of larger companies, underdog biographies may be more believable if they are used as origin stories rather than an illustration of current market position. For example Hewlett Packard owns and preserves the garage they started in and prominently features it on their website. Other companies artfully use an underdog brand biography to position a specific product within the company against the company itself. Frito Lay’s brand Stacy’s pita chips uses an underdog brand biography to distinguish itself from Frito Lay’s top dog brands, Doritos and Fritos.

The moderating role of underdog disposition reminds us of the importance of understanding how consumers see themselves when we are segmenting markets and positioning brands. Many of the respondents in our studies would not be classified as underdogs from a demographic or psychographic perspective; many were white and highly educated, and live in above-average socioeconomic conditions. However, regardless of their demographic or psychographic characteristics, consumers perceive themselves to be underdogs. Hence, it is not merely the visible selves that marketers can
see that drive consumer behavior, it is the internal selves that consumers construct for themselves that connect with brands and drive phenomena such as the underdog effect.

Other identity-related moderators should also be considered in future research. Our results suggest that underdog effects are stronger in identity-relevant purchasing situations such as when consumers are purchasing for themselves versus purchasing for others. This makes it more likely that underdog effects may occur in product categories that are more identity relevant (Berger and Heath 2007), for objects which have social identity functions rather than utilitarian functions (Shavitt 1990), with brands that are more symbolic of identity (Escalas and Bettman 2005), and when choice and product usage is public rather than private (Ratner and Kahn 2002).

Our results also indicate that marketers need to take care when using identity-related narratives for their brands, given cross-cultural differences in consumers’ likelihood to identify with a particular identity narrative. This has implications as companies consider abandoning local, country specific narratives to embrace global narratives for the brand. The identity relevance of brand narratives must be tested market by market.

A question that remains unanswered by this research is the importance of the outcome of the contest to consumers’ response to underdog brand biographies. Eventual success (vs. failure) of the underdog was not an element that emerged from our underdog scale development process. The importance of how an underdog struggle is resolved may be an interesting question for future research to explore. Because there is a temporal component to the underdog narrative, one may encounter an underdog after she has won, after she has lost, or while she is still struggling in a contest. If the underdog effect only applied to underdog winners, then it might not be so valuable to those who are truly disadvantaged. In a preliminary experiment, we tested whether outcome of the contest affected self-brand connection and purchase intention for brands with underdog biographies and top dog biographies. Six conditions were tested: one in which the underdog or top dog is successful, one in which the underdog or top dog has failed, and one in which the underdog or top dog is still competing, leaving the outcome of the contest unknown. While we found a significant main effect for brand biography the main effect of contest outcome and the interaction between brand biography and contest outcome were not significant. Future research to further investigate the relationship between outcome and purchase intention would be helpful to ascertain whether consumers like and identify with underdog brands regardless of their success or failure.

While underdog brand biographies have been shown to have many positive effects there may be boundary conditions that can be explored in future research. There may be product categories for which consumers reject underdog brand biographies, such as hospitals, where consumers believe that being externally disadvantaged jeopardizes quality and safety. Another boundary condition to be explored may involve the credibility of the underdog narrative for a firm. Brands which have pre-existing top dog biographies may find it difficult to credibly adopt underdog brand biographies.

Finally, through our observation and study of emerging marketplace branding practices related to underdog narratives, we have identified a new construct, the brand biography, to complement existing theoretical frameworks for understanding brand meaning. While brand personality (Aaker 1997) describes a set of human characteristics
associated with the brand that are largely static and enduring, a brand biography allows brands to be one thing when they are young and another when they are more mature. This dynamism enlivens the construct of brand personality and gives brands the ability to develop, grow, and change their personas over the course of their lifetime, in much the same way as their consumers do. While extant branding theory largely recommends maintaining consistency in brand meaning over time (Aaker 1991; Kapferer 1992; Keller 1998), this is difficult to achieve in a rapidly shifting marketplace. The brand biography provides theoretical and managerial insight for firms to author a dynamic narrative that can adjust to changing cultural and environmental conditions, yet remain true to the legacy of the brand meaning that has already been established.

It is our hope that our conceptual development of the brand biography construct will spur future exploration in consumer research. While underdog themes are popular in today’s marketplace, brand biographies can address a variety of themes including royal lineage, artisanship, historical biography, or authenticity. A popular brand biography for food products is the artisan who is committed to her craft. There are many food products whose packaging includes personal messages (including signatures) from the founders emphasizing their commitment to artisanship and authenticity.

Researchers may also want to explore the efficacy of the brand biography as a rhetorical form of storytelling. Marketers have long recognized the value of a narrative structure for storytelling and frequently use it in advertising (Puto and Wells 1984; Mick 1987; Deighton, Romer, and McQueen 1989; Stern 1994). By presenting information about the brand in story form, marketers hope to engage consumers in narrative thought processing (Escalas 2004), which has been shown to decrease negative cognitive attributions and generate strong affective responses in consumers (Green and Brock 2000). Brand biographies encourage narrative thought processing because their open-ended narrative structure nudges consumers to fill in the gaps in the brand’s story and to causally link brand events and experiences to brand motives, personality, and developing character. However, unlike other narrative devices used in advertising, brand biographies gain their rhetorical power from the fact that they are more than an arbitrary brand image or a simple recitation of facts about the brand (i.e. its country of origin or manufacture, the origins of its ingredients, or its year of inception). Brand biographies selectively offer anecdotes and incidents to narratively shape a coherent life story for the brand, thereby perhaps making the brand story more tangible and believable, leading consumers to engage with it more easily than they do with brands with fictionalized narrative devices. The dynamism of brand biographies offers consumers multiple points of entry to forge identification with the people behind the brand, and with the brand itself.
### APPENDIX A

**BRAND BIOGRAPHIES USED IN STUDIES 1-4**

<table>
<thead>
<tr>
<th>Study 1</th>
<th>Underdog</th>
<th>Top Dog</th>
<th>Victim</th>
<th>Privileged Achiever</th>
</tr>
</thead>
<tbody>
<tr>
<td>The founders of company A started in a garage with very few resources, but had a dream and struggled to succeed. They overcame the odds to bring their products to market.</td>
<td>The founders of company A came from the industry, were well resourced, and were favored to succeed in the market.</td>
<td>Brand ABC makes bottled juice and iced tea. Brand ABC is a small company with significantly fewer resources than the industry average. Analysts are convinced the founders of brand ABC are determined to succeed and not let anyone get in their way of being #1 in the market.</td>
<td>Brand ABC makes bottled juice and iced tea. Brand ABC is a large company with significantly more resources than the industry average. Analysts are convinced the founders of brand ABC are determined to succeed and not let anyone get in their way of being #1 in the market.</td>
<td>Brand ABC makes bottled juice and ice tea. Brand ABC is a small company with significantly fewer resources than the industry average. Analysts are convinced the founders of brand ABC are determined to succeed and not let anyone get in their way of being #1 in the market.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Study 2</th>
<th>Underdog</th>
<th>Top Dog</th>
<th>Victim</th>
<th>Privileged Achiever</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brand ABC makes bottled juice and iced tea. Brand ABC is a small company with significantly fewer resources than the industry average. Analysts are convinced the founders of brand ABC are determined to succeed and not let anyone get in their way of being #1 in the market.</td>
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<td>Brand ABC makes bottled juice and iced tea. Brand ABC is a small company with significantly fewer resources than the industry average. Analysts are convinced the founders of brand ABC are determined to succeed and not let anyone get in their way of being #1 in the market.</td>
<td>Brand ABC makes bottled juice and ice tea. Brand ABC is a small company with significantly fewer resources than the industry average. Analysts are convinced the founders of brand ABC are determined to succeed and not let anyone get in their way of being #1 in the market.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Study 3</th>
<th>Underdog</th>
<th>Top Dog</th>
<th>Victim</th>
<th>Privileged Achiever</th>
</tr>
</thead>
<tbody>
<tr>
<td>The founders of this brand started their company with very few resources. They had no money and no connections in the industry. They believed that if they tried hard enough, they would be able to achieve their dream and compete in this industry. They felt that they should never accept their current position in the marketplace even though they lacked the resources to compete.</td>
<td>The founders of this brand started their company with many resources. They had a lot of money and many connections in the industry. They knew that they didn’t have to try hard to compete in this industry. They were unmotivated to try and change their current position in the marketplace.</td>
<td>Brand ABC makes bottled juice and iced tea. Brand ABC is a large company with significantly more resources than the industry average. Analysts are convinced the founders of brand ABC are determined to succeed and not let anyone get in their way of being #1 in the market.</td>
<td>Brand ABC makes bottled juice and ice tea. Brand ABC is a small company with significantly fewer resources than the industry average. Analysts are convinced the founders of brand ABC are determined to succeed and not let anyone get in their way of being #1 in the market.</td>
<td></td>
</tr>
</tbody>
</table>
**Study 4**

| Scharffen Berger [Dagoba] is a relatively small and new premium chocolate maker that has had to compete against longtime powerful producers like Lindt and Godiva. Even though they had smaller marketing and distribution budgets, the founders always believed that their dedication and passion for gourmet chocolate would help them overcome the odds and bring their high-quality chocolate to market. Though still relatively less known compared to powerful competitors, they are regarded by gourmet critics to be a very high-quality premium chocolate. | Scharffen Berger [Dagoba] is a premium chocolate maker that is well-resourced and has done well in the chocolate industry. The founders have significant experience in the gourmet food industry and are known to maintain quality in every step of the production process. They are now owned by an international food corporation who was able to build the brand with a large public relations budget, without compromising quality. Because of this heavy financial support, they are now a trendy and well-known brand served in the finest restaurants and gourmet food shops. |
## APPENDIX B
### STUDY 3 RESULTS AND MEDIATED MODERATION TEST

**Summary of Regressions for Mediated Moderation Test (N=182)**

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Equation 1</th>
<th>Equation 2</th>
<th>Equation 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Criterion</td>
<td>Criterion</td>
<td>Criterion</td>
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<tr>
<td></td>
<td>Purchase</td>
<td>Self-Brand</td>
<td>Purchase</td>
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<tr>
<td></td>
<td>Interest</td>
<td>Connection</td>
<td>Interest</td>
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<td><strong>B</strong></td>
<td><strong>SE</strong></td>
<td><strong>B</strong></td>
<td><strong>SE</strong></td>
</tr>
<tr>
<td></td>
<td><strong>β</strong></td>
<td><strong>β</strong></td>
<td><strong>β</strong></td>
</tr>
<tr>
<td>X Biography</td>
<td>0.89</td>
<td>0.99</td>
<td>0.31</td>
</tr>
<tr>
<td>Mo Nationality</td>
<td>-0.22</td>
<td>-0.17</td>
<td>-0.07</td>
</tr>
<tr>
<td>XMo Interaction</td>
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<tr>
<td>Me Self-Brand Connection</td>
<td>0.64</td>
<td>-0.06</td>
<td>0.64</td>
</tr>
<tr>
<td>MeMo Interaction</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p* ≤ .05, **p** ≤ .01, ***p** ≤ .001

**Bold** indicates betas needed to be significant to qualify for a mediated moderation.

+ indicates beta needed to be non-significant to qualify for a full mediated moderation.

X=Manipulation, Mo=Moderator, Me= Mediator

X (biography) and Mo (nationality) are both independent variables.

Muller, Judd, & Yzerbyt (2005)
REFERENCES


TABLE 1
STUDY 1 RESULTS AND MEDIATED MODERATION TEST

Summary of Regressions for Mediated Moderation Test (N=181)

<table>
<thead>
<tr>
<th>Predictors</th>
<th>Equation 1</th>
<th>Equation 2</th>
<th>Equation 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Criterion Purchase Intention</td>
<td>Criterion Identification</td>
<td>Criterion Purchase Intention</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>SE</td>
<td>B</td>
</tr>
<tr>
<td>X Biography</td>
<td>0.72</td>
<td>0.17</td>
<td>0.89</td>
</tr>
<tr>
<td>Mo Underdog Disposition</td>
<td>-0.06</td>
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<tr>
<td>XMo Interaction</td>
<td>0.45</td>
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<tr>
<td>Me Identification</td>
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<td>0.05</td>
<td>0.40</td>
</tr>
<tr>
<td>MeMo Interaction</td>
<td>-0.10</td>
<td>0.06</td>
<td>-0.10</td>
</tr>
</tbody>
</table>

*p ≤ .05, **p ≤ .01, ***p ≤ .001

Bold indicates betas needed to be significant to qualify for a mediated moderation.
+ indicates beta needed to be non-significant to qualify for a full mediated moderation.
X=M=Manipulation, Mo=Moderator, Me=Mediator
X (biography) and Mo (underdog disposition) must be independent. No significant correlation found: r=.03, NS.
Muller, Judd, & Yzerbyt (2005)
FIGURE 1

THE UNDERDOG SCALE

FACTOR 1: EXTERNAL DISADVANTAGE

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)

FACTOR 2: PASSION AND DETERMINATION

1. I always stay determined even when I lose.
2. I show more resilience than others in the face of adversity.
3. Compared to others I am more passionate about my goals.
4. When others expect me to fail I do not quit.
5. Compared to others I do not give up easily.
6. Even when I’ve failed have not lost my hope.
7. Compared to others my dream is more important to the meaning of my life.
8. I fight harder compared to others to succeed when there are obstacles in my way.
9. When I encounter obstacles I usually quit. (R)
FIGURE 2
STUDY 2 EFFECTS OF DISADVANTAGE AND PASSION

Identification with the Brand

Low external disadvantage  High external disadvantage

Low stress and determination
High stress and determination
FIGURE 3
STUDY 4 REAL CHOICE CONTEXT