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Effects of Negative Online Word-of-Mouth on Consumer Evaluations of an Underdog Brand

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Effects of Negative Online Word-of-Mouth on Consumer Evaluations of an Underdog Brand

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ABSTRACT

Research on underdogs has suggested that consumers feel sympathy for and a desire to support the underdog. However, it is unclear how their evaluations of the underdog will change if they receive negative information about it. The current research aims to explore the role of negative word-of-mouth of the underdog, compared to the top dog, in consumers' brand attitude, brand value, and purchase intention. Specifically, drawing on two streams of research, two competing hypotheses are proposed and tested. An experiment was conducted with online consumer panel members. Consistent with confirmation bias and familiarity principle, the results supported a hypothesis that an underdog brand suffers more than a top dog brand from negative online word-of-mouth. Theoretical and practical implications of these findings along with future research directions are discussed.

Key words: underdog, word-of-mouth, consumer evaluation, positioning, confirmation bias, familiarity principle

INTRODUCTION

“I really wanted to like this watch…. Given that it is marketed as a fitness device and has such glaring issues with GPS when used for fitness and that there is a bug causing the battery to suddenly drain I can’t say that it is a finished product nor would I recommend it for anybody who doesn't want to be a beta tester. This will likely be my last update as I am going to get getting rid of this watch after this” (J, writing an Amazon.com review of Sony SmartWatch 3 SWR50).

“I thought that this was the perfect marriage of a smart watch and a fitness tracker. In reality, it fell short in both areas. …. After two weeks, I had to send it back” (Thanatos8877, writing an Amazon.com review of Fitbit Blaze Smart Watch).

“The heart rate monitoring inaccuracy of my Fitbit Charge HR is almost criminal it is so bad” (Johnnyhillclimb, writing a Wearable.com review of Fitbit Charge HR).

In today’s world, technology is constantly improving and it is playing a greater role than ever before. Almost every profession includes the use of technology and in most situations its role is essential. The transformation from old school to high-tech solution is still in process, having the leading technology companies developing new technologies and solutions on a constant rate. In the 21st century it is not about the original computers and their technologies anymore. Many improvements opened up new opportunities and ways to live life. Everything one can possibly think of exists online, and more and more people are shifting from the traditional way to the online world. This includes newspapers, magazines, books, product search and reviews, and shopping.

The goal of this research is to examine how negative online word-of-mouth influences the evaluations of an underdog brand. Even though much research has examined underdog or word-of-mouth issues, little attention has been paid to exploring the relationship between these two marketing variables at the same time. It is important to examine these two variables together since it could have a great impact on how companies should position their brands, and what effects they have to expect from their consumers´ reactions based on their positioning. The current research aims to investigate the role of negative word-of-mouth of an underdog brand versus a top dog brand in consumer evaluations of brand attitude, brand value, and purchase intention.

LITERATURE REVIEW

Fitbit and Wearable Technology

Wearable technology – "electronics that can be worn on the body, either as an accessory or as part of material used in clothing. One of the major features of wearable technology is its ability to connect to the Internet, enabling data to be exchanged between a network and the device" (Radcliffe, 2014). Some of the most popular examples today are health and fitness trackers or smart watches, all of which try to promote a healthier lifestyle that has been trending in the past years. The wearable technology industry is booming and is the next mega tech trend, according to several leading research institutes: "The total wearable computing market is expected to reach up to $34.61 Billion by 2020, growing at a CAGR of 20.7% between 2015 and 2020" (MarketsandMarkets). Juniper estimates "wearable market will be worth approximately $80bn annually by 2020, fashion-first wearables will have a much greater appeal than tech-centric devices, as they will blend in with consumers' lives more effectively" (Juniperresearch, 2015). Leading brands in this industry are Apple, Fitbit, Garmin, Polar, Pebble, Samsung, and Sony.

Fitbit is an appropriate brand to use for this study because its consumer perception varies. Generally, this brand is considered to be an underdog among some consumers, but it can be considered to be a top dog among other consumers. Because of such a different perception about Fitbit, it will be interesting to know how Fitbit needs to position itself in consumers´ minds. The current research is expected to help Fitbit better implement its positioning strategy

Fitbit Inc., one of the leading companies in the wearable technology industry, was born in 2007, when the founders Eric and James realized that sensors and wireless technology had advanced to a point where they could bring amazing experiences to fitness and health. They embarked on a journey to create a wearable product that would change the way we move. They first launched in December 2009 (Fitbit, 2016). Today, they offer nine different devices as well as accessories for their products.

Fitbit Inc. celebrated big success, becoming more known in the wearable technology industry, but they also have to face more and more unsatisfied and angry customers. Negative customer reviews and posts on online portals are increasing, including complaints about product characteristics, durableness, features, and customer service.

Word-of-Mouth

Word-of-mouth communication had a strong influence throughout human history. It has been identified as “the most valuable form of marketing—the one that consumers trust above all others and the one that is most likely to drive sales for your company”(Whitler, 2014). In a company´s marketing strategy, marketers focus on positive word-of-mouth, which is usually achieved by creating products, services and customer experiences that sense a specific value for the customers, and therefore generate conversation-worthy "buzz". Word-of-mouth also exists from the consumer perspective, which serves as a means to exchange valuable information about a product or service. Word-of-mouth has many different subcategories, where online and social media seem to be the most powerful category in today's technological world.

Previous research about word-of-mouth communication is very consistent in the fact that negative word-of-mouth is more informative than positive information, meaning that people weigh negative information more than positive information during evaluation (Herr, Kardes, & Kim, 1991). Further, Sen and Lerman (2007) found that the valence of the reviews (positive vs. negative) significantly affected consumers' attitude towards the reviewed product.

Another finding of past research is that consumers are likely to perceive a high consensus when being faced with a large number of negative product reviews and thus are likely to make negative inferences about the brand, which leads to more negative brand evaluations (Laczniak, Decarlo, & Ramaswami, 2001). Laczniak et al. (2001) also showed that more-positive brand names appear to be protected from the effects of negative word-of-mouth by showing that receivers of negative word-of-mouth are more likely to generate brand attributions for brands with less-favorable names. Bambauer-Sachse and Mangold (2011) support that finding by showing that negative product reviews have considerable detrimental effects on consumer-based brand equity and thus lead to a significant brand equity dilution. Also Chatterjee (2001) proofed that the impact of negative consumer reviews on perceived reliability of retailer and purchase intention is mitigated by consumer's familiarity with the retailer, and that consumer patronizing a familiar retailer are less receptive to negative word-of-mouth information. Another similar finding shows that for a low-image brand, negative messages on an Internet discussion forum significantly reduced consumer brand evaluation and attitude towards the Web owner, whereas positive and neutral messages resulted in similar brand attitude and evaluation (Chiou & Cheng, 2003).

Underdog Theory

Everyone has experienced at least once what it means to be an underdog or was in the position of observing an underdog trying to compete against a top dog. Many people see the underdog status as disadvantageous in the sense of being smaller, weaker, not as good, and of having less resources to succeed compared to competitors. Even though the perception might seem negative, many people can connect with an underdog and tend to support those who are not expected to succeed against advantaged rivals but who still try nonetheless, which is referred to as the "underdog effect" (Simon, 1954). This support was present throughout history and across different contexts, from biblical characters such as David and Goliath to political arenas across cultures, sports teams, talent contests etc.

A great amount of existing research deals with the theory of an underdog and supports the underdog effect. Different ways in which an underdog exists: when the person/company/team is externally disadvantaged in general or lacks the necessary resources to compete effectively (Paharia et al., 2011), when people are more likely to support an entity that is expected to lose, or when a unit attempts to accomplish a difficult task despite a low probability of success against an advantaged opponent (Kim et al., 2008). Research also shows that underdog brand biographies have two underlying dimensions, which define the underdog by both their personal characteristics as well as their external situation: external disadvantage, and passion and determination (Paharia et al., 2011).

Further, Sunkyu. et al. (2015) examined that the personality trait of empathic concern influences a consumer's reactions to underdog versus top dog positioning in advertising, which in turn have a positive influence on the attitude towards the advertised brand. There is also evidence that in direct comparison with a top dog brand, an underdog brand can actually benefit from its position, and the top dog actually suffers, since consumers feel sympathy for and want to support the underdog (Paharia, Avery, & Keinan, 2014).. Additionally, it shows that the framing-the-game effect results from making the competition salient to consumers (Paharia, Avery, & Keinan, 2014).

HYPOTHESIS DEVELOPMENT

The focus of this study is to examine the effect of negative online word-of-mouth on consumer evaluations of an underdog brand. Based on existing research regarding word-of-mouth and underdog theory, I argue that there are two competing theories. The first stream of theories claims that compared to a top dog brand, an underdog brand will suffer more when negative word-of-mouth about the brand is prevalent (see Table 1). For example, according to confirmation bias, people tend to search for and favor information that confirms their preexisting beliefs, while almost ignoring alternative possibilities (Chatterjee, 2001; Chiou & Cheng, 2003). In addition, familiarity principle also predicts that the impact of negative online word-of-mouth will be greater for the underdog, compared to the top dog brand because consumers already have stronger feelings or confidence about the top dog brand (Chatterjee, 2001; Laczniak et al., 2001).

The second stream of theories argues that compared to an underdog brand, a top dog brand will suffer more when negative word-of-mouth about the brand is widespread. For example, according to the floor effect or diminishing return, negative word-of-mouth affects a top dog brand greater than an underdog since the underdog is expected to lose less from the addition of another negative impact since it’s inferior (Simonson et al., 2004). This is consistent with research about multiattribute diminishing sensitivity, explaining that the relatively superior alternatives loses more from the introduction of negative impacts than the inferior brand (Nowlis & Simonson, 1996). Another example is the framing-the-game effect from Paharia et al. (2014), where an underdog benefits from direct comparison with a top dog and the latter suffers resulting from making the competition salient to the consumers. Direct comparison triggers a heightened motivation to express one´s views and have an impact in the marketplace through purchase choices, and to support ideas that are important to them. Thus, I predict the following competing hypotheses:

$H1_A$: The negative online word-of-mouth will have a stronger impact on an underdog brand compared to a top dog brand.

$H1_B$: The negative online word-of-mouth will have a stronger impact on a top dog brand compared to an underdog brand.

RESEARCH METHODS

The goal of this study is to examine the effect of negative online word-of-mouth on consumer evaluations of an underdog brand in regards to brand attitude, brand value, and purchase intention. It is expected to show when negative word-of-mouth matters more for certain brands than others.

Pilot Study 1

The first pilot study was carried out to develop stimuli and check the manipulations. One hundred thirteen students from a research subject pool at the University of New Orleans participated in this study. As a compensation for their time, extra credit was offered. A smart watch was used as a product category in two reasons: Smart watches are trending now and many people are expected to have some knowledge about it, and smart watches are expensive, high involvement products so consumers are likely to take into account other consumers' opinions such as online consumer reviews at the time of making a brand selection .

First, the valence of online reviews was manipulated by showing either 4 positive reviews or 4 negative reviews of a brand. To check the manipulation, we used a three-item 7-point scale, ranging from 1 (very negative, very bad, very unfavorable) to 7 (very positive, very good, very favorable) (Cronbach's alpha = .969). As expected, participants in the positive review condition ($M = 6.07$) evaluated the reviews more positively than those in the negative review condition ($M = 2.62$, $F(1,109) = 216.4$, $p < .0001$). Even though the manipulation of the valence of online reviews was successful, some participants raised a question about credibility of the reviews because all of the reviews they read were either all positive or all negative.

Second, the target brand was manipulated by presenting either Fitbit for an underdog or Apple for a top dog in a product purchase scenario. All of the information presented was identical between these two brand conditions. To check the manipulation of the brand's underdog status, we asked participants to rate how passionate and determined the target brand was as well as how externally disadvantaged the brand was (1 = not at all, 7 = very much) (Paharia et al. 2011). Even though it was expected that participants in the underdog condition would rate the brand as more passionate, determined, and externally disadvantaged, compared to those in the top dog condition, the difference was not statistically significant (p's $> .05$). Two reasons seemed to have contributed to the failed manipulation check of the brand status. One potential reason is that there are a number of participants who viewed Fitbit as a top dog, rather than an underdog, in the smart watch industry because of its reputation in the fitness tracker market. The other reason is that it might have been difficult for participants to relate the words (e.g., passionate, determined, externally disadvantaged) used in the manipulation check questions to a particular brand if they are not familiar with brands in the smart watch market.

Based on these findings, we modified the stimuli and ran the second pilot study. Specifically, we introduced a fictitious brand, used the mixed reviews, and strengthened the manipulation of the target brand status. In addition, we recruited a more representative sample in the next study.

Pilot Study 2

One hundred online panel members from mTurk (Amazon Mechanical Turk) participated in this study (Mean age = 37.3, Female = 52%). They received $.40 as compensation for their time. We used a fictitious brand, "Jump Start", to reduce participants' preconceived bias about actual brands.

First, the valence of online reviews was manipulated by presenting either dominantly positive reviews (i.e., 3 positive reviews and 1 negative review) or dominantly negative reviews (i.e., 3 negative reviews and 1 positive review) of a brand. The same 3-item 7-point scale was used for the manipulation check (Cronbach's alpha = .996). As predicted, participants in the dominantly positive review condition ($M = 6.23$) evaluated the reviews more positively than those in the dominantly negative review condition ($M = 1.76$, $F(1,96) = 234.2$, $p < .0001$). Thus, the valence manipulation was successful again even after its realism was enhanced.

Second, the target brand status was manipulated by explicitly mentioning the market status of the brand. For example, for the underdog (top dog) condition, participants learned that the brand is a small (large) company, its current market share is 10% (60%), and the founders had neither money nor connection to (both a lot of money and many connections in) the industry. In addition, a new four-item 7-point scale was used for the manipulation check (1 = strongly disagree, 7 =strongly agree) (e.g., "There are more obstacles in the way of this brand succeeding compared to others," "This brand fights harder compared to others to succeed when there are hurdles in its way") (Paharia et al. 2011). As expected, participants in the underdog condition considered the brand to be more resilient with fewer resources ($M = 5.66$) than those in the top dog condition ($M = 3.12$, $F(1, 96) = 135.7$, $p < .0001$).

Even though each of these two independent variables was successfully manipulated, the participants' evaluations of the brand itself did not appear to be jointly influenced by these variables. For example, when they were asked to rate their attitude toward the brand, their brand attitude decreased after they read negative, rather than positive, reviews, but the change in their brand attitude was not impacted by whether it was about an underdog or a top dog ($p > .05$). Such findings seemed to be mainly driven by participants' low familiarity with the fictitious brand used in this study, regardless of its market status. To resolve this concern, we manipulated the brand status by varying consumers' familiarity in the main study.

Main Study

Participants. We recruited two hundred participants from mTurk (Amazon Mechanical Turk) and they received $.40 as compensation for their time. Forty-five participants were eliminated because they did not properly follow the instructions. Overall, we had 155 participants that met all requirements for the data analysis.

Design and Stimuli. A 2 (target brand status: underdog vs. top dog) x 2 (valence of online reviews: positive vs. negative) between-subjects design was carried out to test the hypotheses. Two independent variables, the valence of online word-of-mouth (positive vs. negative) and the target brand status (underdog vs. top dog), were manipulated.

Procedure. Participants were first asked to answer several warm-up questions regarding their familiarity with wearable technology and the importance of the online consumer review in their decision of purchasing an electronic product. They were also given five different brand names, where they had to define with which they are most familiar and least familiar. On the next page, the least familiar brand each participant selected was presented as an underdog whereas their most familiar brand appeared as a top dog. Depending on their brand status condition, participants were asked to read the market status and biographies of a different brand.

After reviewing brand information, participants were told to evaluate their perception of the brand status, which is composed of the same four-item 7-point scale used in pilot study 2. Next, they assessed their attitude toward the brand, brand value, and purchase intention. Brand attitude was measured on three-item 7-point scale (1 = very unfavorable, very negative, very bad; 7 = very favorable, very positive, very good) (Dawar & Pillutla, 2000). Brand value was operationalized by asking participants to rate their perceived brand value (1 =

very low, 7 = very high) (Bambauer-Sachse & Mangold, 2011). Purchase intention was measured on a 7-point scale (1 = not at all likely, 7 = very likely) (Dawar & Pillutla, 2000). The next page contained four consumer online reviews about the brand presented. As explained in pilot study 2, participants were presented with either dominantly positive (i.e., 3 positives and 1 negative) or dominantly negative reviews (i.e., 3 negatives and 1 positive). After reading the reviews, participants were asked to write their thoughts about the reviews. Once they generated the list, participants were instructed to evaluate the reviews on three-item 7-point scale (1 = very negative, very bad, very unfavorable; 7 = very positive, very good, very favorable). Finally, they answered to the same brand attitude, brand value, and purchase intention questions again.

RESULTS

Manipulation Checks

As expected, participants in the underdog condition ($M = 5.26$) perceived their underdog status higher than those in the top dog condition ($M = 3.71$; $F(1,151) = 83.23$, $p < .0001$). In addition, participants in the dominantly positive review condition ($M = 5.80$) evaluated the review more positively than those in the dominantly negative review condition ($M = 1.843$; $F(1,151) = 1{,}289.1$, $p < .0001$). Thus, both manipulations were successful.

Hypothesis Testing

Before testing the hypothesis, we created new measures that capture the change in participants' brand attitude, brand value, and purchase intention after they read the online reviews. For example, the change in brand attitude was defined as post-review attitude score minus pre-review attitude score.

Change in Attitude Toward the Brand. As predicted, the valence of the reviews differentially impacted participants' attitude toward each brand. People's attitude changed between top dog and underdog only when the reviews were negative ($F(1,151) = 10.83$, $p < .001$), whereas their attitude did not change between top dog and underdog when the reviews were positive ($F(1,151) < 1$, $p = .84$).

In particular, consistent with $H1_a$, there was a significant interaction effect between brand status and valence of online reviews on the change in brand attitude ($F(1,151) = 5.31$, $p < .03$). Participants' attitude dropped when they received negative, rather than positive, reviews, regardless of whether they were about top dog (Mean difference: -2.72, $p < .0001$) or underdog (Mean difference: -3.54, $p < .0001$). Yet, the decrease in the mean difference was larger in the case of underdog, compared to top dog. That is, this result supports $H1_a$ predicting that the underdog would suffer more than the top dog if participants were presented with the negative reviews.

Change in Brand Value. Unlike brand attitude, brand value was not influenced b. Participants' perceived brand value did not change between top dog and underdog, regardless of whether the reviews were negative ($F(1,151) = 2.09$, $p = .15$) or positive ($F(1,151) = 2.29$, $p = .13$).

Nevertheless, consistent with $H1_a$, there was a significant interaction effect between brand status and valence of online reviews on the change in brand value ($F(1,151) = 4.36$, $p < .04$). Participants' perceived brand value dropped when they received negative, rather than positive, reviews, regardless of whether they were about top dog (Mean difference: -2.53, $p < .0001$) or underdog (Mean difference: -3.32, $p < .0001$). Again, the decrease in the mean difference was larger in the case of underdog, compared to top dog. That is, this result supports $H1_a$ predicting that the underdog would suffer more than the top dog if participants were presented with the negative reviews.

Change in Purchase Intention. As expected, the valence of the reviews differentially impacted participants' purchase intention. Participants' purchase intention changed between top dog and underdog only when the reviews were negative ($F(1,151) = 17.10$, $p < .0001$), whereas their purchase intention did not change between top dog and underdog when the reviews were positive ($F(1,151) < 1$, $p = .83$).

In addition, consistent with $H1_a$, there was a significant interaction effect between brand status and valence of online reviews on the change in purchase intention ($F(1,151) = 8.54$, $p = .004$). Participants' purchase intention dropped when they received negative, rather than positive, reviews, regardless of whether they were about top dog (Mean difference: -1.93, $p < .0001$) or underdog (Mean difference: -3.15, $p < .0001$). Again, the decrease in the mean difference was larger in the case of underdog, compared to top dog. That is, this result supports $H1_a$ predicting that the underdog would suffer more than the top dog if participants were presented with the negative reviews.

DISCUSSION

Summary

The study supported our expectation that negative online word-of-mouth does have a stronger effect on an underdog brand, rather than a top dog brand. Results prove that the consumers´ attitude toward the underdog brand, compared to the top dog brand, decreased more after reading negative reviews about that brand. Consumers´ perceived brand value and purchase intention also decreased more after reading negative reviews about the underdog brand, rather than the top dog brand. These findings suggest that people tend to search for information that confirms their prior beliefs about a familiar brand.

Theoretical Implications

The current work aligns with confirmation bias and familiarity principle predicting that an underdog brand will suffer more from negative reviews than a top dog brand (Laczniak et al., 2001). Consumers´ degree of familiarity with a brand mitigates the adverse impact of negative consumer reviews of purchase intention, resulting in a greater negative difference for the underdog brand (Chatterjee, 2001). The study supported our expectation that consumers´ brand evaluation and attitude towards the underdog brand are significantly reduced when negative word-of-mouth is presented to the consumers (Chiou & Cheng, 2003), but the top dog was affected as well, just not as significantly.

Managerial Implications

The study offers some new insight into how marketing managers should communicate with their customers about their brand status. Their decision could have significant effects on a brand´s success regarding brand awareness, consumer satisfaction, and sales. For an underdog brand, it is important for marketers to reduce negative word-of-mouth as much as possible, since it does cause a lot of harm to the company. On the other hand, positive word-of-mouth can greatly impact an underdog brand, since they have a lot of room to grow.

This study has an important managerial implication for Fitbit regarding how to position itself among different segments. Whenever they launch a new product and enter a new market, they should position itself as an underdog because it has a larger room to grow with positive information. This requires strict consumer evaluation monitoring and elimination of any negative reactions. For already mature products, Fitbit should position itself as a market leader and top dog brand, so negative consumer evaluations will not hurt them as much and they can still compete with the other rival companies.

Limitations and Future Research Directions

The current research has several limitations and offers various directions for future research. To begin with, one limitation of this research is that even though we can prove that negative online word-of-mouth does negatively affect consumers´ evaluations of an underdog brand, we cannot conclude the definite source of that effect. For example, confirmation bias claims that it will be a consumer's selective information search that protects the top dog brand from getting hurt from new negative information (Chatterjee, 2001; Chiou & Cheng, 2003), whereas familiarity principle argues that it will be a consumer's stronger feeling or confidence about the familiar top dog brand that helps resist against the negative information (Chatterjee, 2001; Laczniak et al., 2001). It will be paramount to further investigate its underlying process in order to figure out which theory explains this phenomenon better.

In addition, the findings are limited to the smart watch industry that is still unfamiliar to many consumers. To better test the role of an underdog brand effect, it will be important for consumers to know the underdog brand well as much as the top dog. The question therefore remains, how does negative online word-of-mouth impact different industries and products? For all variables, our results indicate that negative online word-of-mouth strongly affects an underdog brand by decreasing consumers´ evaluations. Our expectation, however, is that the top dog brand should not suffer much from negative reviews due to consumers´ loyalty to the bran. Nevertheless, results show that they significantly suffer as well, just not as significant as the underdog brand. We must therefore question the effect difference of negative online word-of-mouth for an underdog versus a top dog brand, and recommend further academic investigations of this word-of-mouth effect.

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APPENDIX

Table 1
Selected Empirical Studies on the Effect of Word-of-Mouth and the Underdog Position

Study	Support	Theories and key findings
Laczniak, Decarlo, and Ramaswami (2001)	$H1_A$	• Receivers of negative word-of-mouth communication are **more likely to generate brand attributions for brands with less-favorable names**, signaling that brand name does have a direct effect on the attributions generated by the word-of-mouth receivers
Chatterjee (2001)	$H1_A$	• Consumer's **familiarity with a retailer mitigates the deleterious impact of negative consumer reviews** on perceived reliability of retailer and purchase intention • Consumers patronizing a familiar retailer are less receptive to negative word-of-mouth information
Chiou and Cheng (2003)	$H1_A$	• Negative messages on an Internet discussion forum significantly **reduced consumer brand evaluation and attitude towards the low-image brand**, whereas a high-image brand was not affected • Infrequent negative comments on discussion forums will not affect consumer brand evaluation and attitude toward a well-established company
Baumbauer-Sachse and Mangold (2011	$H1_B$	• Negative online product reviews show a destructiveness with respect to consumer-based brand equity • The fact that **brand equity dilution** exists implies that the deterioration of brand value perceptions is stronger in the case of comprehensive brand knowledge than in the case of poor brand knowledge
Nowlis and Simonson (1996)	$H1_B$	• A new feature contributes more to the perceived value of products that have inferior existing features or lower perceived brand quality than to products with superior features or brand names (**diminishing return**)
Paharia et al. (2014)	$H1_B$	• An underdog can benefit from direct comparison with a top dog brand and the top dog actually suffers from it • The **framing-the-game effect** results from making the competition salient to the consumers
Simonson, Kramer, and Young (2004)	$H1_B$	• **Effect propensity** states that most manipulations applied to a reference state are likely to increase the share of the option with higher growth potential • A high-quality domination option tends to lose greater share when another respondent chooses the low-quality option than it gains when the other respondent chooses the high-quality option (**floor effect**)

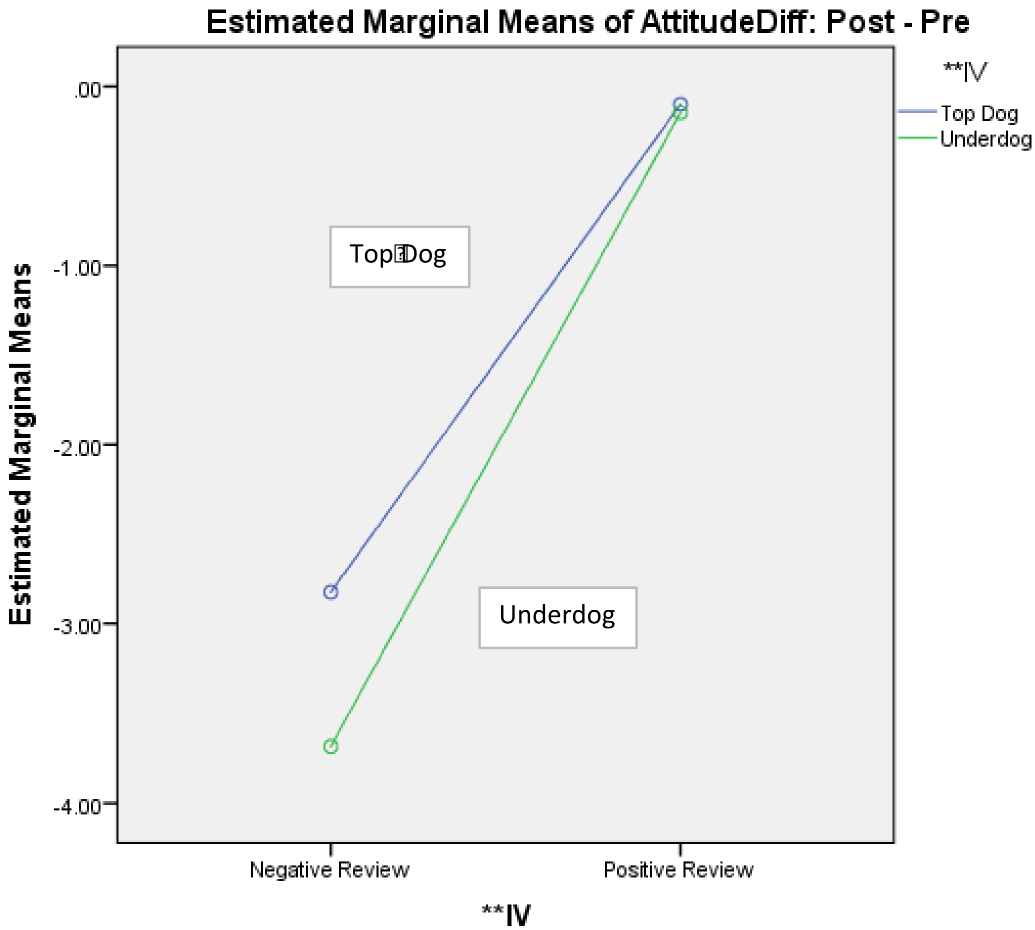

Figure 1 Estimated Marginal Means of AttitudeDiff: Post – Pre

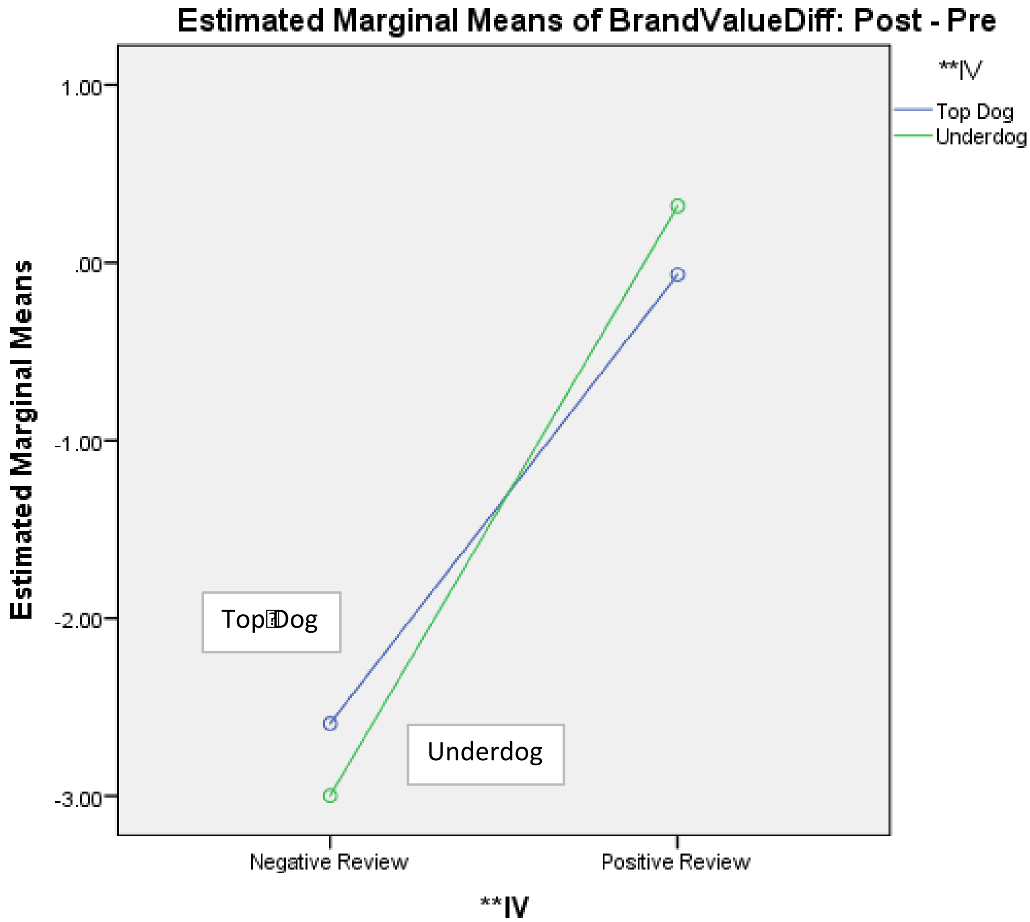

Figure 2 Estimated Marginal Means of BrandValueDiff: Post – Pre

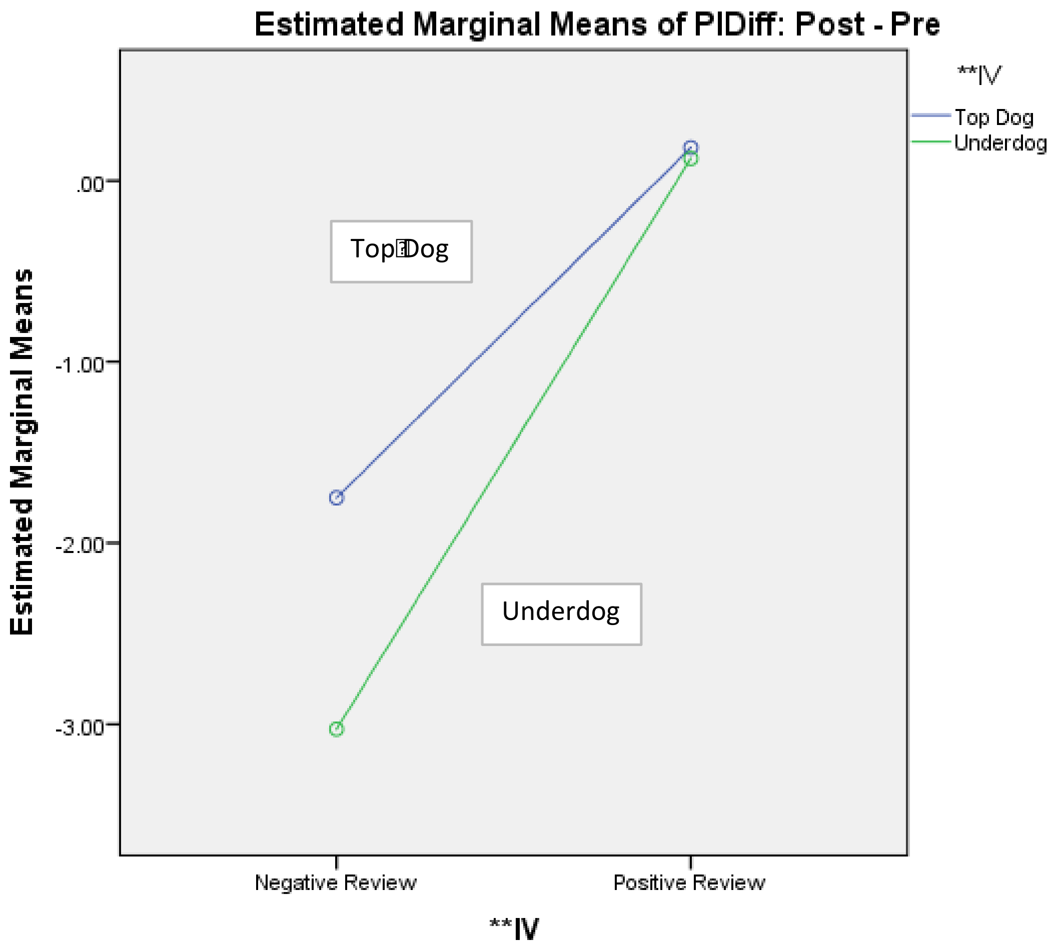

Figure 3 Estimated Marginal Means of PIDiff: Post – Pre

Questionnaire

<u>Introduction</u>:

Thank you for taking this survey. The main objective is to examine consumers' brand evaluations under the scenario that follows. The survey may take approximately 10 minutes of your time. Your responses are VERY important to us. Please carefully read all the information presented to you and then answer the questions that follow. Once you turn the page, you cannot go back to the previous page.

I. Warm-Up Questions

Q1. How familiar are you with wearable technology (i.e., clothing and accessories incorporating computer and advanced electronic technologies)?

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)
Please select (1)	•	•	•	•	•	•	•

Q2 How knowledgeable are you with wearable technology?

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)
Please select (1)	•	•	•	•	•	•	•

Q3 How familiar are you with the brands that use wearable technology? Please select the brand you are most familiar with from the following.

- Apple (1)
- Samsung (2)
- Sony (5)
- Garmin (3)
- Fitbit (4)

Q4 How familiar are you with the brands that use wearable technology? Please select the brand you are least familiar with from the following.

- Apple (1)
- Samsung (2)
- Sony (5)
- Garmin (3)
- Fitbit (4)

Q5 How important are the following factors in your decision making process of purchasing an electronic product?

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)
Product Advertisement (1)	•	•	•	•	•	•	•
Online Consumer Reviews (2)	•	•	•	•	•	•	•
Price (3)	•	•	•	•	•	•	•
Experience of Friends or Family with the Product (4)	•	•	•	•	•	•	•

II. Brand Evaluations

Please imagine that you have planned to start your healthy journey with a lot of exercising. To push yourself and better achieve your goals, you decided to buy a smart watch. Among several brands, XXX is the smart watch you are considering. After searching a number of websites, you found a report that describes XXX´s market status and features. Please take your time reviewing the information presented below because you will be asked about this product on the following pages (You can click the "Next" button 30 seconds after you review this page):

XXX's Market Status:
- XXX's current market share in the smart watch industry is only about 10%.
- The founders had neither money nor connection in the industry when they started the company.
- The founders always believed that their dedication and passion would help them overcome the odds even though they had very few resources.
- Industry experts say that this company makes a very high quality smart watch.

XXX's Features:
- Continuous, wrist-based heart rate monitoring
- Connected GPS for real time stats and mapping
- FitStar workouts with on-screen coaching
- SmartTrackTM automatic exercise recognition

Q6 Based on the information presented, how do you feel about the following statements for XXX?

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)
There are more obstacles in the way of this brand succeeding compared to others. (1)	•	•	•	•	•	•	•
This brand has to compete with others that have more resources than this brand. (2)	•	•	•	•	•	•	•
This brand shows more resilience than others in the face of adversity. (3)	•	•	•	•	•	•	•
This brand fights harder compared to others to succeed when there are hurdles in its way. (4)	•	•	•	•	•	•	•

Q7 Based on the information presented, what do you think about XXX Smart Watch?

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)
Very unfavorable:Very favorable (1)	•	•	•	•	•	•	•
Very negative:Very positive (2)	•	•	•	•	•	•	•
Very bad:Very good (3)	•	•	•	•	•	•	•

Q8 Based on the information presented, how do you perceive XXX's brand value in this product category?

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)
Please select (1)	•	•	•	•	•	•	•

Q9 Based on the information presented, how likely are you to purchase XXX Smart Watch?

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)
Please select (1)	•	•	•	•	•	•	•

III. Consumer Online Reviews

Here are 4 recent consumer reviews that you found on a well-known website. Please read them carefully and respond to the questions on the following pages (You can click the "Next" button 30 seconds after you review this page).

Reviews for XXX

“Very disappointed! I expected way more from my smart watch. Maybe it’s just me but I wouldn’t buy it again.”

“My XXX smart watch is awesome. I'm very happy with its features and performance.”

“An absolute waste of money!! They advertise the amazing features of their smart watch but at the end they don’t even really work. Step count goes up when I’m cooking in place but then it doesn’t work when I go walk my dog. And this is not the only thing that doesn’t work. Don’t waste your money!”

“XXX smartwatch was a present since I wanted to become healthier and exercise more, I was thrilled. Already after the first few days of using it though I realized that the advertisements don’t match the reality at all. It doesn’t track your exercises appropriately, some it can’t track at all, and the GPS system for outdoor activities is terrible. So mad my family spent that much money on this.”

Q10 Your Thoughts While reading through the online consumer reviews XXX smart watch on the previous page you may have had some thoughts. Please list down all thoughts and feelings that came to your mind. These may be related to the company featured or to any other related or unrelated matter. Please take your time to write down anything that occurred to you. A brief phrase is sufficient to describe each idea. Please begin each thought on a new line.

1 (1)
2 (2)
3 (3)
4 (4)
5 (5)

Q11 How do you evaluate the consumer reviews about XXX?

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)
Very unfavorable:Very favorable (1)	•	•	•	•	•	•	•
Very negative:Very positive (2)	•	•	•	•	•	•	•
Very bad:Very good (3)	•	•	•	•	•	•	•

Q12 After reading the online consumer reviews, what do you think about XXX Smart Watch?

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)
Very unfavorable:Very favorable (1)	•	•	•	•	•	•	•
Very negative:Very positive (2)	•	•	•	•	•	•	•
Very bad:Very good (3)	•	•	•	•	•	•	•

Q13 After reading the online consumer reviews, how do you perceive XXX's brand value in this product category?

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)
Please select (1)	•	•	•	•	•	•	•

Q14 After reading the online consumer reviews, how likely are you to purchase XXX Smart Watch?

	1 (1)	2 (2)	3 (3)	4 (4)	5 (5)	6 (6)	7 (7)
Please select (1)	•	•	•	•	•	•	•

IV. Background Information

Q15 How frequently do you exercise per week?

Q16 Which of the following fitness tracker or smart watch brands do you currently use? (Check all that apply)
- Apple (2)
- Samsung (3)
- Sony (7)
- Garmin (4)
- Fitbit (1)
- Other (Please specify) (5) ____________________
- I don't have a fitness tracker/ smart watch (6)

Q17 What is your gender?
- Male (1)
- Female (2)

Q18 How old are you?

Thank you for your participation! Please press the "Next" button so that you can see the survey code.