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When the Little Guy Wins: Exploring the Underdog Effect in Hedonic and Utilitarian Consumption Domains

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Abstract

The underdog effect, whereby entities perceived as less likely to succeed attract greater support, is a widely used strategy in sports, politics, and business. This study examines the impact of different consumption domains, hedonic and utilitarian, on the underdog effect. Using a microwave oven as utilitarian and a restaurant as hedonic, this paper demonstrates a moderating effect of the consumption domain. The results, derived from a survey of 187 participants, show that consumers prefer the underdog for hedonic consumption and the top dog for utilitarian products. Understanding this comparison is crucial for effectively exploiting the underdog effect.

Keywords: Underdog, Top Dog, Consumption Domains, Hedonic, Utilitarian, Consumer Behavior

1. Introduction

David versus Goliath, Harry Potter versus Voldemort, Apple versus Microsoft. History, fantasy, and the real world are all stages for underdogs who fight and work their way up against a superior and stronger enemy or competitor, driven by dedication and the will to succeed against all odds. The phenomenon of the underdog is as old as mankind itself and continues to find relevance and validation in contemporary literature and in numerous fields and sectors.

The underdog effect refers to the phenomenon whereby individuals or entities perceived as less likely to succeed attract greater support and favorable attitudes than their more dominant counterparts. It has been studied in a variety of contexts, including sports, politics, and business. Research has shown that the underdog effect is driven by several psychological and social factors, including feelings of empathy, a sense of fairness and justice, and a desire for social and economic equality (Ryan & Deci, 2000). Remarkably, the underdog effect cuts across several demographic sectors. Individuals who are white, well-educated, and live in above-average circumstances still identify as underdogs. This makes the effect a powerful marketing tool, particularly in Western societies such as the US, where it embodies the aspirational American dream (McGinnis & Gentry, 2009). Identification is the strongest support motive for the underdog (Kim et al., 2008; Paharia et al., 2011). Throughout life, people regularly experience periods when they feel inferior to the majority of their environment. As a child, feeling inferior to adults due to size; as a teenager, competing with peers; or as a young adult, starting your first job and feeling inferior to colleagues in terms of knowledge. All these situations make us identify with the underdog.

But alongside the Davids, Harrys and Apples of the world, there are also the Goliaths, Voldemorts and Microsofts. The counterpart to the underdog is the so-called top dog. These are players with abundant resources and dominant market shares who are expected to triumph over underdog rivals (Paharia et al., 2011). While previous research suggests that people prefer to associate with winners and distance themselves from losers, favoring top dogs (Cialdini et al., 1976; Cialdini & Richardson, 1980; Cialdini & De Nicholas, 1987), the underdog effect continues to thrive and remains highly effective across different consumer groups.

This thesis aims to investigate the underdog effect in the context of consumer behavior. Analysis of the gathered data reveals that the underdog effect is significant in hedonic consumption, unlike utilitarian consumption where the positioning as underdog is rather disadvantageous. Hedonic refers to the pleasure

or enjoyment derived from a product or experience. The concept of hedonic motivation has been defined as ‘the pursuit of pleasure and the avoidance of displeasure’ (Hirschman & Holbrook, 1982). In the context of consumer behavior and marketing, hedonic products are often defined as those that provide emotional or sensory benefits and are purchased for reasons other than practicality or functional needs. Hedonic products are associated with emotion, personal identity and self-expression and are often purchased for their aesthetic appeal, design, and social status connotations (Kivela & Rattray, 2014). In addition, consumers show lower price sensitivity and higher risk-taking behavior in hedonic consumption domains (Botti & McGill, 2011; Newton et al., 1998; Xiang et al., 2014). Utilitarianism, on the other hand, is associated with the practical or functional aspects of a service or product. Hirschman & Holbrook (1982) define utilitarian motivation as the goal of achieving practical benefits and avoiding negative consequences. Such products are purchased for their practicality, cost-effectiveness, and the benefits they provide (Kivela & Rattray, 2014).

This research seeks to evaluate the underdog effect in both consumption domains, an area that has received limited attention compared to its application in other domains such as politics and sports (Shirai, 2017). In addition, we delve into the often-overlooked limitations and boundaries of the underdog effect. Despite being lauded for its positive influence, its potential to backfire and undermine desired strategies has been neglected. This is supported by Paharia et al. (2011), who highlight the importance of examining product/service categories for the success of the underdog effect. Delgado-Ballester (2020) comes to the same conclusion that future research on the underdog effect should include a greater variety of products/services with different functions.

The practical implications of this research are significant, particularly for companies considering underdog branding for their products or services. The findings will enable companies to determine whether such positioning is beneficial or whether it may have negative effects, depending on the product's association with the hedonic or utilitarian consumption domain. Consequently, the research question of this study is RQ: *When does underdog positioning backfire, comparing hedonic and utilitarian consumption domains?*

In order to answer this research question, a comprehensive survey was conducted among consumers, taking into account both hedonic and utilitarian consumption. By analyzing the data, the aim was to identify patterns and draw insightful conclusions about the impact of underdog branding on consumer preferences.

By shedding light on the complexities and nuances of the underdog effect, this research will contribute valuable insights to both the academic literature and marketing strategies. This research fills a significant gap in the existing literature and offers practical implications for firms seeking to use the underdog effect to gain a competitive advantage. In addition, the study introduces the novel concept of product type moderation, which will enhance our understanding of the factors influencing the underdog effect and its overall effectiveness. The research aims to provide guidance to marketers and practitioners in their decision-making process regarding brand positioning and communication strategies. The study of underdog branding in both hedonic and utilitarian consumption domains is essential for a comprehensive understanding of its impact on consumer behavior and preferences.

In the following chapters, this thesis provides a solid theoretical foundation, hypotheses, and methodology. The results of the survey are then presented and discussed. Finally, the conclusion provides a comprehensive overview of the findings and outlines future research prospects.

2. Theoretical Foundation

To fully understand the phenomenon of the underdog, and the underdog effect, it is important to understand its origins. The term underdog first appeared at the end of the 19th century and since then has been used to mean ‘... the person who seems least likely to succeed or win’ (“Underdog Definition und Bedeutung | Collins Wörterbuch”, 2023). The origin of the term can be traced back to the dog itself. Over 100 years ago, when dog fights were very common, the losing animal was called the underdog because it would usually submit and roll over on its back, literally under its rival (“Underdog - Definition, Meaning & Synonyms | Vocabulary”, n. d.).

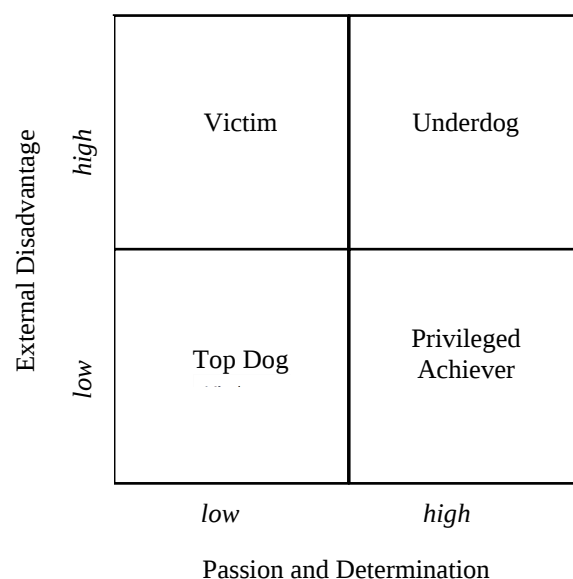
Being deep-seated in linguistic usage there are many different motives for supporting the underdog. In their study, McGinnis and Gentry (2009) identified five motives that account for underdog support. Through in-depth interviews and focus groups, the authors show that support for the underdog can be attributed to 1) a sense of empathy, 2) nostalgia, 3) the American Dream/individuality, 4) freedom of choice, and 5) inspiration.

Most striking, and mainly related to empathy and nostalgia, is the identification with the product and therefore underdog. In consumer studies, it has been demonstrated that individuals tend to opt for possessions and brands that align with their self-identity (Kassarjin 1971; Sirgy 1982; Dittmer 1992). The self-congruence

hypothesis supports this notion, stating that people prefer brands and products that mirror their true or desired self-image while avoiding those inconsistent with their identity (Gardner and Levy 1955; Levy 1959; Kassarian 1971; Sirgy 1982). Self-brand attachment is a crucial aspect of consumer behavior, influencing the consumer-brand relationship significantly (Fournier 1998; Aaker et al., 2004) and shaping brand attitudes and behaviors (Escalas, 2004). Paharia et al. (2011) were able to solidify these previous studies. Not only did they show that people would prefer an underdog brand biography to a top dog brand biography, but they also demonstrated that this mechanism is mediated by the process of self-identification as an underdog. The underdog biography is particularly prevalent in childhood when the sheer difference in size and power is an obstacle that children try to overcome. Marketers are aware of this unconscious mechanism and use the underdog effect successfully in all sectors, most obviously in politics with e.g., Barack Obama, who successfully positioned himself as an underdog when he became the first African American president of the United States of America.

Having talked about the underdog, its appeal, and definitions, we will now shed some light on the underdog's 'evil' brother, the top dog. Recalling from section two, the underdog is defined as '... the person who seems least likely to win' ("Underdog Definition und Bedeutung | Collins Wörterbuch", 2023). On the other hand, the top dog is defined as '...the most successful or powerful person in a particular group' ("Top dog Definition und Bedeutung | Collins Wörterbuch", 2023). Thus, the power discrepancy and the likelihood of winning are determined by the definitions of the terms themselves. The underdog cannot exist without a comparison to the top dog, as the benchmark of a stronger competitor is the mechanism that makes the

Figure 1: Underdog Disposition Matrix as proposed by Paharia et al. (2011)



underdog attractive. This comparison is then referred to as the underdog effect, where the expected 'loser' upsets and overcomes the 'winner' (Ceci & Kain, 1982; McGinnis & Gentry, 2009; Paharia et al., 2011; Simon, 1954). Paharia et al. (2011) were pioneers in investigating the precise dimensions of an underdog/top dog narrative. Using factor analysis, the authors identified 18 items on which an underdog narrative depends. These 18 items resulted in two factors that define an underdog narrative, namely 1. external disadvantage, and 2. passion and determination. Items loading on the first factor include relatively high barriers and fewer resources. Items loading on the second factor include resilience, perseverance, and passion for a dream. A true underdog would score high on the passion and determination factor and high on the external disadvantage factor. A true top dog, on the other hand, would score low on the passion and determination factor and low on the external disadvantage factor.

Hoch and Deighton (1989) categorize brands as underdogs (top dogs) depending on their market position (weak or dominant) determined by their market share compared to other brands in the same category. An example of consumer brands available in Austria would be Fritz Cola vs. Coca-Cola. Founded in 2006, Fritz-Cola is a producer of beverages ranging from Coke to other soft drinks, with strong similarities to Coca-Cola's repertoire of Coke, Fanta, and Co. At an external disadvantage to Coca Cola, which holds 44% of the soft drinks market (Statista, 2022), Fritz-Cola has managed to compete successfully with its humble image against its large competitor.

The matrix designed by Paharia et al. (2011) is crucial for this paper as both identified factors will be used as the basis for determining 1. people's own assessment as underdog/top dog and 2. the owner biographies, which are the main component of the forthcoming survey.

But even though, literature suggests that the underdog effect finds validation throughout numerous studies and is a well-established cultural and psychological phenomenon, there is proof that this strong mechanism has limitations and boundaries as to its field of application. As per definition, the underdog is predicted to lose („Definition of underdog“, 2023) the conclusion of supporting the stronger counterpart, the top dog, appears logical. People's urge of associating with 'winners' and the disassociation from 'losers' is set in human's DNA with Charles Darwin's genesis theory 'Survival of the fittest' (Darwin, 1859).

Cialdini et al. (1976) were able to prove this assumption. They investigated support behavior for sports teams. The study shows that students were more likely to were

branded apparel displaying their university's logo after the sport team's victory than a loss. Hence, consumers should prefer top dog brands as those are more likely to succeed (Cialdini et al., 1976; Cialdini & Richardson, 1980; Cialdini & De Nicholas, 1987). Conversely, the implication for this study would be that consumers should distance themselves from underdog brands to avoid being associated with the expected loser. In terms of consumer behavior, a lack of resources is an indicator of poor quality, which heavily influences decision-making. Therefore, consumers would favor top dog brands as they can deliver better quality products.

Similar conclusions are drawn by Kim et al. (2008). The authors argue that consumers will favor the underdog as long as the support does not result in disadvantages for the consumers themselves. For example, if supporting the underdog will result in higher prices and more inconvenience for the customer, the support will be for the weaker party will be dropped. This suggestion is supported by Batson et.al. (1997), who conducted research on moral principles and found that people are quick to violate their moral principles when it suits their interests.

Another set of limitations relates to identity-related regulators, which form the core of this paper. The findings of Paharia et al. (2011) suggest that the underdog effect is stronger for identity-related purchases, such as when consumers buy for themselves rather than for others. Thus, the underdog effect would be greater when the same product is purchased for personal use rather than as a gift. Research suggests that the likelihood of the underdog effect occurring in product categories increases as they become more identity relevant (Berger and Heath, 2007). Furthermore, the underdog effect is more probable for products serving social identity purposes rather than utilitarian ones (Shavitt, 1990). Brands with strong identity connotations are also more likely to evoke the underdog effect (Escalas and Bettman, 2003), particularly when the product's use and selection are visible to others (Ratner and Kahn, 2002).

The aim of this paper is to test this limit of the underdog effect and to investigate whether the effect shows different levels of significance for different product types, being hedonic and utilitarian.

3. Hypothesis Development

As described by Paharia et al. (2011), an underdog brand story portrays a company facing external challenges and limited resources, yet driven by unwavering spirit, passion, and determination to succeed. In contrast, the top dog brand story features a brand with abundant resources or market dominance due to its strong advantage. The passion of the top dog is lower compared to the underdog. As mentioned in section two, there are many reasons for supporting the underdog, ranging from a sense of empathy and nostalgia to a degree of inspiration (McGinnis and Gentry, 2009). However, the most prominent is identification with the underdog and the underdog brand. Brand identification refers to a consumer's psychological or emotional attachment to a brand. Customers' brand identification is influenced by different brand narratives (Paharia et al., 2011). According to a survey by Paharia et al. (2011), the majority of consumers feel that they are in an underdog position. The principle of self-consistency suggests that consumers are more likely to identify with brands that portray their disadvantages. Specifically, the portrayal of challenges, limited external support, unwavering spirit, and passionate determination in an underdog brand story allows customers to relate their own struggles to the brand. This fosters empathy, strengthens customer brand identification, triggers the underdog effect, and generates positive responses (Avery, Paharia, Keinan, & Schor, 2010; Paharia et al., 2011).

Therefore, the first step of this paper is to examine the effect of an underdog brand biography. According to Paharia et al. (2011), an underdog biography can increase consumer preference for an underdog product. As the previous paper focused on physical goods, this paper aims to examine the underdog effect in the service and retail sectors. Considering the previous findings, the first hypothesis is as follows: *H1: Consumers are likely to favor the underdog when their own biography is framed as an underdog rather than a top dog.*

When it comes to purchasing decisions, consumers are known to consider either hedonic or utilitarian aspects, which are mapped onto different components to distinguish between types of consumption (Dhar and Wertenbroch, 2000). Strahilevitz and Myers (1998) proposed that hedonic consumption is driven by the desire for pleasure and fun, whereas utilitarian consumption is driven by the satisfaction of basic needs or the completion of practical tasks. This distinction has been widely accepted and adopted in consumer behavior research (Botti and McGill, 2011; Chandon et al., 2000; Namkoong and Raghunathan, 2010; Grewal et al., 2003). Hedonic purchases include items such as perfumes, chocolates, and designer clothes, while utilitarian purchases include items such as appliances and

work clothes (Aaker, 1997; Dhar and Wertenbroch, 2000; Kronrod et al., 2012). However, this distinction is not static, and products can be considered more utilitarian or hedonic depending on their perceived benefits. A key difference between the two types of consumption is that hedonic consumption is more emotionally driven than utilitarian consumption. As a result, consumers evaluate hedonic consumption based on internal, subjective, and discretionary criteria, whereas utilitarian consumption is evaluated based on external, objective and mandatory criteria (Botti and McGill, 2011).

The narrative of a top dog's biography often portrays them as possessing abundant resources and achieving success through inherent advantages. This information tends to give consumers a sense of security and trust in the product and brand. Conversely, the underdog brand narrative primarily appeals to consumers on an emotional level, aiming to evoke sympathy and identification with the weaker party (Avery et al., 2010; Paharia et al., 2011). The emotional appeal of the underdog brand narrative can clash with the perception of a functional product. Moreover, it emphasizes unfavorable circumstances and limited resources, leading consumers to make decisions solely based on this information, whether to support or avoid the brand. In such circumstances, it can lead to lower ratings of product performance and brand image, as well as reduced brand identification. Therefore, for functional products, the top dog brand narrative increases consumer brand identification, while the underdog brand narrative decreases it, resulting in lower overall brand identification.

Consumers seek hedonic products to satisfy their self-concept and self-image needs (Aggarwal et al., 2011). According to self-consistency theory, individuals are more likely to choose brands that are consistent with their self-concept and avoid brands that are inconsistent with it (Kassarjian, 1971; Sirgy, 1982). Compared to the top dog brand narrative, the underdog brand narrative, which emphasizes unfavorable external conditions, unwavering enthusiasm, and determination, is more similar to the experiences of most consumers (Paharia et al., 2011).

Considering previous findings, it can be assumed that consumers will support the underdog if it can be attributed to hedonic rather than utilitarian consumption. Li and Zhao (2018) investigated the effect of product type, comparing hedonic and utilitarian storytelling. The authors chose a mobile phone as the manipulation variable. In the first condition, they positioned the mobile phone as utilitarian and as a means of communication, highlighting its practical use. In the second condition, the mobile phone is presented as hedonic, emphasizing characteristics such as the fashionable design and the experience associated with using this device.

However, in this paper both hedonic and utilitarian domains are depicted using two different products, a microwave oven for the utilitarian condition and a restaurant for the hedonic condition, following the work of Dhar and Wertenbroch (2000) and Kronrod et al. (2012) who argue that both products are representative of their respective consumption domain. Furthermore, the study by Li and Thao (2018) was conducted in Wuhan, China, a collectivist society when referring to Hofstede's cultural dimension theory. Austria and the Western world, on the other hand, are more individualistic societies (Hofstede & Bond, 1984). As studies prove that cultural background plays a mediating role in the underdog effect when comparing western societies with Asian societies (Paharia et al., 2011), the investigation of the topic in the geographical area of Austria is even more justified.

Therefore, this paper hypothesizes that the consumption domain plays a moderating role in supporting the underdog, leading to the following hypotheses:

H2: Consumers are likely to favor the underdog, more so in hedonic consumption than in utilitarian consumption.

4. Methodology

4.1. Research Design

In order to answer the above hypotheses, a quantitative research approach was chosen in the form of an online survey conducted using SoScie Survey Software. Following similar studies by Kim et al. (2008) and Paharia et al. (2011), the effects of an underdog biography and a top dog biography are investigated. A 2x2 between-subjects design will be used. This approach allows the manipulation of both the biography (underdog and top dog) and the consumption domain (hedonic and utilitarian), resulting in four different conditions to which participants are randomly assigned. The decision to use a between-groups design is supported by Field (2017), who argue that multiple groups help to avoid spillover effects, in which knowledge gained from previous survey questions would bias all upcoming questions and thus lead to biased results.

4.2. Procedure

Regarding the structure of the questionnaire, the first section is dedicated to the introduction of the survey as part of the master's thesis. Participants are only told that the topic of the survey is related to consumer behavior in order to avoid bias. Participants are then assigned to one of two consumption domains. One is the hedonic consumption domain and the other is the utilitarian domain. A restaurant is chosen for the hedonic domain and a microwave oven for the utilitarian domain.

For comparison purposes, both items/services can be assigned to the food category. In addition, both represent typical products for hedonic and utilitarian consumption (Dhar and Wertenbroch, 2000; Kronrod et al., 2012). The consumption domains are as follows:

Hedonic Domain: You like to eat out. You are new to the area and are looking for information about restaurants in your area. You scan the local newspaper, find a restaurant that suits your taste, and see the owner's introduction in the article.

Utilitarian Domain: A microwave oven you have been using at home has broken down. You decide to buy a new one because it is inconvenient not to have one. However, you have only recently moved to your current area and do not know where the electronics shops are. While scanning the Internet for an electronics store near your home, you find a page that introduces the owner of an electronics store.

The first manipulation concerns the area of consumption. The second relates to the narrative (underdog and Top Dog). After being exposed to one of the two consumption domains, participants are again assigned to one of the two narratives, resulting in four different groups. (1. hedonic/underdog, 2. utilitarian/underdog, 3. hedonic/top dog, 4. utilitarian/top dog). The owner biographies were created following the work of Paharia et al. (2011) and their 'Underdog Disposition Matrix' as shown in section two. In their study, Paharia and her colleagues identified two main factors that contribute to the underdog characteristic. The first is external disadvantage and the second is the level of passion and determination. Both factors were considered in the biographies. In fact, the biographies were adapted from the work of Shirai (2017), who also designed her research according to Paharia et al. (2011). The biographies are as follows:

Underdog Owner: The owner started this business with very limited management resources. He has had to overcome many difficulties and obstacles due to limited financial resources and poor personal connections. The owner feels that competition in this industry is fierce. However, he believes that his dream will come true and that can be successful in the future if he continues to intensify his efforts to satisfy customers. He feels it is important to continue to take on new challenges in this business and is definitely not satisfied with the current situation.

Top Dog Owner: The owner started this business with extensive management resources because he had been successful in other industries. Because of his financial resources and extensive personal connections, the business is doing very well. The owner feels that competition in this industry is not intense. He is satisfied

with the current situation and does not feel the need to challenge himself by doing something new in this business or changing the current way of running his business.

To control for possible effects related to the price and size of the firm, this information is completely ignored to focus only on the effect of biography. After exposure to the different conditions, the rest of the survey remains the same for all four groups. Participants are asked about their attitudes towards the restaurant/electronics shop. Specifically, participants are asked to rate statements such as *'I would like to eat/buy in this restaurant/shop'*. Participants are then asked to rate the degree of external disadvantage and passion and determination in each biography, as well as the degree to which the restaurant and electronics shop have hedonic or utilitarian characteristics. These results are relevant for later manipulation checks. In the next part, each participant's own underdog disposition was assessed in order to investigate whether their own biography has an impact on the significance of the underdog effect. The last part of the questionnaire consisted of the demographic data of each participant (see Appendix E).

4.3. Variables and Measurements

As mentioned in the previous section, the study consists of four different conditions. However, the variables and measures remain the same. After exposure to one of the four conditions (1. hedonic/underdog, 2. utilitarian/underdog, 3. hedonic/top dog, 4. utilitarian/top dog), participants are asked to rate statements about the restaurant/shop such as *'I would like to eat/buy in this restaurant/shop'*, *'This restaurant/shop seems interesting to me'*, *'Based on the owner's statement, I think this restaurant/shop is good'*. The items are rated on a seven-point Likert scale (1 = 'not at all' to 7 = 'very much'), following the design of Paharia et al. (2011) and Shirai (2017). As the responses to all three items showed high internal consistency (Cronbach's $\alpha = .958$), they were transformed into a single index indicating the dependent variable of the study 'Restaurant/Store Attitude' (Appendix A).

In order to measure participants' own underdog disposition, the 18-item Paharia et al. (2011) scale was adopted. As mentioned in section two, these 18 items measure participants' external disadvantage and passion and determination, both of which are factors loaded by the 18 items. Instead of using eight items per factor, this study uses only five items per factor to reduce the length of the survey. Items measuring passion and determination are *'Compared to others, I am more passionate about my goals'*, *'I always stay determined even when I lose'* and others, see Appendix E for full insight. Items measuring external disadvantage are *'I started from a disadvantaged position in achieving my goals compared to my peers'*, *'I have had*

to struggle more than others to get where I am in life' and others, see also E for full insight. The items are rated on a seven-point Likert scale (1 = 'not at all' to 7 = 'very much'). As expected, the five items on external disadvantage show a high internal consistency (Cronbach's $\alpha = .868$). The same applies to the five items on passion and determination (Cronbach's $\alpha = .874$). Finally, all ten items are summarized, and participants have been allocated to one of the dispositions as depicted in Figure 1 (Appendix A), forming the first independent variable 'Participant's Biography.'

The biography of the owner is coded binary (0 = underdog owner; 1 = top dog owner) and results from the random allocation of participants to one of the two conditions. It is the second independent variable called 'Owner Biography.'

The moderating effect of the consumption domain is examined by comparing the means of the variable 'Restaurant/Store Attitude' in different conditions. That is if the mean of 'Restaurant/Store Attitude' differs depending on the biography of the owner. This will show whether the underdog effect is more significant in hedonic than in utilitarian consumption domains.

5. Results

5.1. Sample Characteristics

The survey was carried out using SoSci Survey Software over a six-week period from May 1st to June 15th, 2023. Participants were recruited using snowball sampling within the author's personal circle. A total of 486 clicks was recorded, of which 201 were completed. This sample was then subject to further data cleaning. During a pretest with ten participants, the time for completion of the survey has been measured. Through monitoring, it was ensured that participants read the instructions and questions thoroughly. The lower limit for this measure was at 67 seconds. This time limit has been tested by the author himself running five additional questionnaires. Reading the questionnaire fully in those five additional rounds results in a lower limit of 65 seconds. The upper time boundary was at 322 seconds corresponding to approximately 5 minutes. This time is considered normal and therefore no exclusions in the upper boundary have been undertaken. The final sample consists of 187 participants, of which 91 are female, 96 male, and 1 diverse ($N = 187$, $M_{Age} = 28.06$, $SD = 5.8$, $Min_{Age} = 18$, $Max_{Age} = 53$). The majority of respondents are students 47.6%, followed by employees 42.2%, entrepreneurs 6.4% and retired 3.7%.

5.2. Manipulation Check

The manipulation in this research was twofold. The first variable to be manipulated is the type of biography, distinguishing between a top dog biography and an underdog biography. The exact wording of the biographies can be found in section 4.2. The biographies are measured by the items 'passion and determination' and 'external disadvantage', both on a seven-point Likert scale (1 = 'not at all' to 7 = 'very much'). An independent samples t-test shows that the underdog biography scores significantly higher on the 'passion and determination' item than the top dog biography ($M_{Udog} = 6.02$, $M_{Tdog} = 2.84$, $t(186) = 20.06$, $p < .000$). The same is true for the measure of 'external disadvantage'. The underdog biography scores significantly higher than the top dog biography ($M_{Udog} = 5.98$, $M_{Tdog} = 2.42$, $t(186) = 21.57$, $p < .000$). Therefore, all four means across the two different biographies are in the expected direction and the manipulation check is considered successful.

The second manipulated variable was the consumption domain, which was hedonic and utilitarian. The hedonic domain used a restaurant as an example and the utilitarian domain used a microwave oven. Hedonic characteristics in the hedonic domain were measured by the items '*Going to the restaurant makes my life more joyful*' and '*Going to the restaurant gives me pleasure*'. In the utilitarian domain, hedonic characteristics were measured with the items '*Using a microwave makes my life more joyful*' and '*Using a microwave brings me pleasure*', all on a seven-point Likert scale (1 = 'not at all' to 7 = 'very much'). In both conditions, the two items showed high internal consistency (Cronbach's $\alpha = .788$ hedonic domain) and (Cronbach's $\alpha = .885$ utilitarian domain). Therefore, both items were averaged to form an overall hedonic index.

An independent samples t-test on the hedonic index as a function of the consumption domain shows that the hedonic consumption domain scores significantly higher on the overall hedonic index than the utilitarian domain ($M_{Hedo} = 6.21$, $M_{Util} = 2.41$, $t(186) = 26.89$, $p < .000$). Both means point in the expected direction and the manipulation is considered successful.

To measure utilitarian characteristics, the hedonic consumption domain used the items '*Going to a restaurant is very convenient*' and '*Going to a restaurant is very cost-effective*'. The utilitarian items were '*Using a microwave is very convenient*' and '*Using a microwave is very cost-effective*'. However, unlike the hedonic items, the two utilitarian items could not be averaged into an overall utilitarian index because (Cronbach's $\alpha = .378$ hedonic domain) and (Cronbach's $\alpha = .348$ utilitarian domain). The manipulation check is therefore performed for each item individually.

An independent samples t-test shows that the microwave scores significantly higher for convenience ($M_{Micro}=5.38$, $M_{Rest}=3.99$, $t(186)=7.4$, $p<.000$) as well as for cost-effectiveness ($M_{Micro}=5.64$, $M_{Rest}=2.33$, $t(186)=19.6$, $p<.000$). In both cases the means are in the expected direction and the manipulation can be considered successful.

5.3.Main Analysis

To test hypothesis one, following the study by Li and Zhao (2018), we run a two-way ANOVA with 'Owner's Biography' (0 = underdog; 1 = top dog) and 'Participant Disposition' (0 = underdog; 1 = top dog; 2 = victim; 3 = privileged achiever) as independent variables. Even though the Likert scale is considered an ordinal scale, this paper follows the previously mentioned approach. Recall from section two that there are two other biographies besides the underdog and the top dog. The victim scores low on both the passion & determination and external disadvantage dimensions, and the privileged achiever scores low on external disadvantage and high on passion & determination. These participants' dispositions result from the 10-item scale adapted from Paharia et al. (2011) used in the survey. The distribution of the participants' own biographies is as follows: (Underdog $N=105$; Top Dog $N=33$; Victim $N=3$, Privileged Achiever $N=46$). Solly from the distribution we see a large difference in group size, especially with the privileged achievers ($N=3$). A closer look at the privileged achievers reveals that two participants identified as PAs in the underdog questionnaire and one participant identified as a PA in the top dog questionnaire. Both participants in the underdog questionnaires rated 'Attitude' with seven ($M_{PA}=7$), artificially inflating the overall group mean. Under these circumstances, both the assumption of normality with the Shapiro-Wilk test ($p<.001$) and the assumption of homogeneity of variance with the Levene's test ($p=.019$) are violated. Therefore, the privileged achievers are considered outliers and excluded from further analysis, resulting in a new sample size ($N=184$) (Appendix D).

Re-running the assumption tests with the adjusted sample resulted in a significant result for equality of variance with Levene's test ($p=.063$). The normality assumption is still violated with the Shapiro-Wilk test ($p<.001$). Since ANOVA is considered a robust construct for assumption violation (Field, 2017) and the main assumption of homogeneity of variance is given, we will proceed with the analysis.

Table one shows the summary of the ANOVA comparing the means of each group. The first row, 'Corrected Model', indicates that the overall model is significant ($F(8, 176)=3.077$, $p=.003<.05$). Since the confidence interval is set at ($CI=0.95$) and

($p = .003 < .05$), we can assume a significant difference between the group means. All three control variables being Gender, Age, and Income do not show significant results and therefore we can assume that there is no effect on the outcome variable. Moving on to the 'Participant Biography' row, we see that the participant's own

Table 1: Tests of Between-Subject Effects

Source	Type III SS	df	MS	F	p
Corrected Model	65.130 ^a	8	8.141	3.077	.003
Intercept	166.380	1	166.380	62.877	<.001
Gender	.413	1	.413	.156	.693
Age	22.815	1	22.815	8.622	.084
Income	3.570	1	3.570	1.349	.247
Participants Biography	6.464	2	3.232	1.221	.297
Owner Biography	15.099	1	15.099	5.706	.018
Participants Biography x Owner Biography	24.409	2	12.204	4.612	.011
Error	460.423	174	2.646		
Total	3758.968	183			
Corrected Total	530.554	182			

biography alone does not influence consumer attitudes, as the p-value exceeds the set confidence interval of 95% ($F(2, 181) = 1.221, p = .297 > .05$). However, the main effect of 'Participant Biography' cannot be significant either way. This is because the survey channeled either an underdog owner or a top dog owner. Thus, an individual assessment of the effect of participant biography on attitude is not possible, as it occurred under the influence of either an underdog or a top dog owner. Moving on, we see that 'Owner Biography' is statistically significant ($F(1, 182) = 5.706, p = .018 < .05$). Therefore, we can assume that there is a difference in consumer attitude depending on the biography that the owner channels. The most important point of the ANOVA is now the interaction of the two previously mentioned variables in the row 'Participants Biography x Owner Biography'. Hypothesis one aims to find out whether participants with an underdog biography are also more likely to favor underdog companies, hence the interaction effect. The table shows that the interaction effect of both variables is significant, ($F(2, 181) = 4.612, p = .011 < .05$), and that the difference in attitudes toward underdog and top dog owners is influenced by participants' own biographies.

To reveal the relationship between the two independent variables, a simple main effects analysis is applied. In fact, only one of the three biographies shows a significant difference in means when it comes to attitude towards the company. Only the top dog participants achieved a significant result ($M_{TDud} = 4.83$, $SD = 2.27$ vs. $M_{TDtd} = 2.96$, $S = 1.16$) ($F(,182) = 10.175$, $p = .002$)(Appendix D). Contrary to expectations, this means that participants who identify as top dog prefer underdog companies more than top dog companies. The assumption that consumers with an underdog biography prefer underdog companies cannot be proven. The model does not yield a significant result ($M_{UDud} = 4.43$, $SD = 1.68$ vs. $M_{UDtd} = 4.27$, $S = 1.73$) ($F(1,182) = .258$, $p = .612$). This means, the significant interaction effect the ANOVA has suggested, is only due to top dog participants. Underdogs and privileged achievers don't show differences in their attitude toward the owner regardless of if he/she is positioned as underdog or top dog. Therefore, hypothesis one is not supported.

For hypothesis two another two-factorial ANOVA was applied. Prior to the analysis, necessary assumptions were investigated. The first assumption of the independence of observations was given since participants in each group took the survey independently of each other. Furthermore, the assumption of the normality of residuals is met according to the Shapiro-Wilk Test ($p=.068$). The third assumption, homogeneity of variance, is also met with Levene's Test of Equality of Error Variance ($p=.417$). Finally, the assumption of a continuous dependent variable is met.

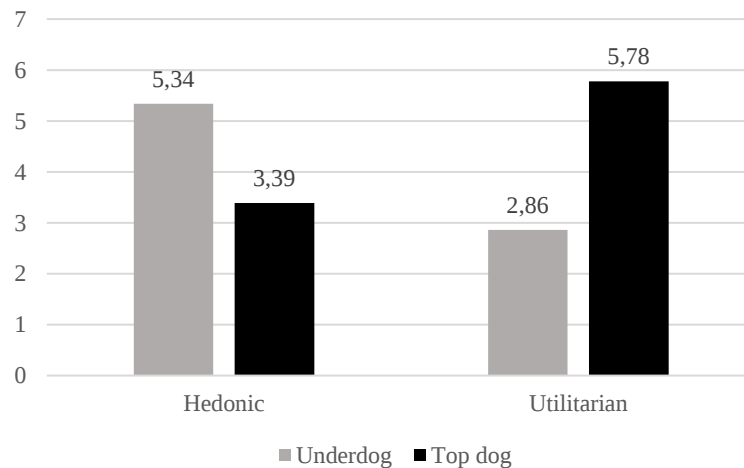
Table 2: Tests of Between-Subject Effects

Source	Type III SS	df	MS	F	p
Corrected Model	278.785 ^a	6	46.464	33.139	<.001
Intercept	132.456	1	132.456	94.470	<.001
Gender	.375	1	.374	.267	.606
Age	4.158	1	4.158	2.965	.087
Income	.001	1	.001	.001	.982
Consumption Domain	.055	1	.055	.039	.843
Owner Biography	8.954	1	8.954	6.386	.012
Consumption Domain x Owner Biography	245.313	1	245.313	174.962	<.001
Error	246.768	183	1.402		
Total	3758.968	187			
Corrected Total	525.554	186			

The two-factorial ANOVA yielded the following results: There is no significant main effect of the consumption domain on the attitude toward the business ($F(1, 185) = .039, p = .843 > .05$). Again, just as in the previous ANOVA the consumption domain alone cannot have a significant effect on consumer's attitude. Recalling the survey, the domains are represented by a microwave and a restaurant. Both the microwave and the restaurant either channel a top dog or an underdog biography. Therefore, the assessment of the consumption domain solely is not possible. Hence no significant result. The biography of the owner (underdog/ top dog) shows a significant main effect on the attitude towards the business ($F(1, 185) = 6.386, p = .012 < .05$).

Same results have been achieved in ANOVA one. With significant results, we assume that the means of underdog and top dogs owners differ. Most importantly again is the interaction effect in 'Consumption Domain x Owner Biography' ($F(1, 182) = 245.313, p < .001$) (Table 2). The results are highly significant with ($p < .001$) and we can assume that the attitude towards the underdog and top dog owner strongly depends on the consumption domain they are embedded in. The next step is to determine the relationship between the consumption domain and the biography of the owner to understand their interaction effect on the dependent variable 'Attitude'.

Figure 3: Mean of 'Attitude' under consideration of different consumption domains (hedonic/utilitarian) and biography of the owner (underdog/top dog)



Conducting a simple main effect analysis revealed that for owners whose biography is framed as an underdog the utilitarian consumption domain scored lower on the attitude compared to the hedonic consumption domain ($M_{UDhed} = 5.34, SD = 1.12$ vs. $M_{UDutil} = 2.86, SD = 1.05$) ($F(1,100) = 107.65, p < .001$). For top dog owners, the case is in reverse. Top dog owners in the utilitarian domain score higher on the

attitude index than top dog owners in the hedonic consumption domain ($M_{TDhed} = 3.39, SD = 1.31$ vs. $M_{TDutil} = 5.78, SD = 1.31$) ($F(1,85) = 87.260, p = <.001$).

This means that participants favor the underdog restaurant more than the underdog electronics store. On the other hand, top dog electronics store owners receive better scores than underdog owners selling microwaves. In addition, when investigating the difference in the consumption domain, the analysis reveals that attitude in the hedonic domains is significantly higher for underdog owner compared to top dog owners ($M_{HedTD} = 3.39, SD = 1.31$ vs. $M_{HedUD} = 5.34, SD = 1.12$) ($F(1,85) = 61.55, p = <.001$) In the utilitarian condition, it again is reversed. top dog owners score high on the attitude index whereas underdog owners score lower ($M_{UtilTD} = 5.78, SD = 1.31$ vs. $M_{UtilUD} = 2.86, SD = 1.05$) ($F(1,95) = 140.01, p = <.001$) (Table 3). These results indicate that restaurant owners are better off with an underdog positioning compared to a top dog positioning. Electronics store owners however benefit from a top dog narrative compared to an underdog narrative. Considering the results of the ANOVA, the consumption domain indeed has a moderating effect in the relationship between the biography of the owner and the customer's attitude toward the business. Therefore, hypothesis two is supported.

5.4.Discussion

The purpose of this study was to examine the underdog effect in the context of consumer behavior, with a particular focus on hedonic and utilitarian consumption domains. The results of the study shed light on the complexities and nuances of the underdog effect, providing valuable insights for both academic literature and marketing strategies.

The first hypothesis examined whether consumers are more likely to favor underdog firms when they perceive themselves as underdogs. According to the literature of Paharia et al. (2011), Kim et al. (2008), and McGinnis & Gentry (2009), identification was the main motive for supporting the underdog. Therefore, the expected results would show the aforementioned relationship between one's disposition as an underdog and one's preference for underdog firms. Analysis of the data revealed a significant interaction effect between the participant's own biography (underdog, top dog, or privileged achiever) and the owner's biography (underdog or top dog). However, further exploration through a simple main effects analysis revealed that only top dog participants showed a significant difference in attitudes toward underdog and top dog owners. Surprisingly, participants who identified as top dogs preferred underdog companies more than top dog companies.

On the other hand, there was no significant difference in attitudes between underdog and privileged achiever participants based on the owner's biography.

Given the data, it should be noted that the difference in group sizes was quite large (Underdog $N = 105$; Top Dog $N = 33$; Victim $N = 3$, Privileged Achiever $N = 46$), making the statistical comparison challenging. In addition, the victims' group was completely eliminated from the sample because it artificially pushed the group mean and violated the assumptions of ANOVA. After eliminating the victims, the normality assumption of the residuals was still violated. Although the literature argues that ANOVA is a robust construct for assumption violation (Field, 2018), it could still affect the significance of the results. In addition, participants' underdog disposition was measured using the 18 items (this study only used 10, see Appendix E for insights) suggested by Paharia et al. (2011). Given the complexity of human personality and identification, the measurement of underdog disposition should have received more attention and effort in the study. Therefore, the results suggest that the underdog effect may not be as simple as previously thought and that other factors may influence consumer preferences for underdog brands.

The second hypothesis aimed to examine the moderating role of consumption domains (hedonic vs. utilitarian) on the underdog effect. The analysis revealed a significant interaction effect between consumption domain and owner biography on participants' attitudes toward the firm. For underdog owners, attitudes were significantly higher in the hedonic domain compared to the utilitarian domain. Conversely, for top dog owners, attitude was significantly higher in the utilitarian domain compared to the hedonic domain. These results suggest that the underdog effect is more pronounced in hedonic consumption domains, while the top dog positioning is more effective in utilitarian consumption domains. In other words, the restaurant owner scores better in terms of consumer attitudes when he is portrayed as the underdog rather than the top dog. The electronics store, on the other hand, was better off using a top dog narrative than an underdog narrative.

Linking these findings to literatures creates an even stronger basis for reasoning. A utilitarian product aims to satisfy a need rather than a desire (Gierl & Huettl, 2010), in this case food preparation. For this reason, consumers are more concerned with quality, which the biography of the top dog implies by emphasizing its abundant resources. The hedonic product aims at satisfying personal desires (Gierl & Huettl, 2010). Here, the underdog biography, characterized by high passion and a disadvantaged position, makes the biography more relatable to consumers.

Overall, the study contributes valuable insights to the academic literature on the underdog effect and its application to consumer behavior. The results suggest that the underdog effect is not a universal phenomenon and may be influenced by various factors, including the individual's self-perception, the type of consumption domain, and the owner's biography. By understanding the intricacies of the underdog effect, marketers can better leverage this phenomenon to gain competitive advantage and create more effective branding and communication strategies.

6. Conclusion

The story of the humble man fighting his way to the top is nothing new to today's consumers. The underdog effect is a powerful tool that has been studied by various researchers, demonstrating its potential to gain consumer favor in various sectors. This paper focuses on one of the limitations of the phenomenon, showing the limits to the extent to which the underdog effect can be used to influence consumer behavior. More specifically, this research demonstrates the importance of the underdog effect in changing consumption domains, thereby extending the literature on the underdog effect in consumer research. The results of this study revealed several important insights into the underdog effect and its impact on consumer preferences. Contrary to expectations, consumers' own biographies as underdogs or top dogs did not significantly influence their attitudes toward underdog or top dog owners. The study showed that the primary factor influencing consumer attitudes was the biography of the owner, whether positioned as an underdog or a top dog. Top dog owners were more favored in the utilitarian consumption, while underdog owners received more support in the hedonic consumption domain. These findings have important practical implications for marketers and practitioners. Understanding when and how the underdog effect is most effective can help companies make informed decisions about brand positioning and communication strategies. The study highlights the importance of aligning the underdog narrative with the product's identity and consumer needs. Utilitarian products may not benefit from underdog positioning because it can raise doubts about the product's quality and functionality. On the other hand, hedonic products can use the underdog effect to evoke empathy and identification, leading to stronger consumer support.

Limitations of the study include the relatively small sample size, which may limit the generalizability of the findings, and the use of self-report measures, which may be subject to social desirability bias. Future research could address these limitations by conducting larger studies with diverse samples and using more objective measures of consumer attitudes. In addition, examining other potential moderators of the underdog effect could further enhance our understanding of this phenomenon.

In conclusion, the underdog effect remains a powerful and relevant marketing tool, but its application requires a nuanced understanding of context and consumer psychology. This study contributes to the existing literature by highlighting the importance of considering the interaction between consumer self-perception and consumption domains when leveraging the underdog effect in branding and marketing strategies.

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Appendix A - Chapter Variables and Measurements

Reliability Test for DV 'Restaurant/Store Attitude'.

Case Processing Summary

		N	%
Cases	Valid	187	100.0
	Excluded ^a	0	.0
	Total	187	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.958	3

Reliability Test for IV 'Participants Disposition' – External Disadvantage.

Case Processing Summary

		N	%
Cases	Valid	187	100.0
	Excluded ^a	0	.0
	Total	187	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.868	5

Reliability Test for IV 'Participants Disposition' – Passion and Determination.

Case Processing Summary

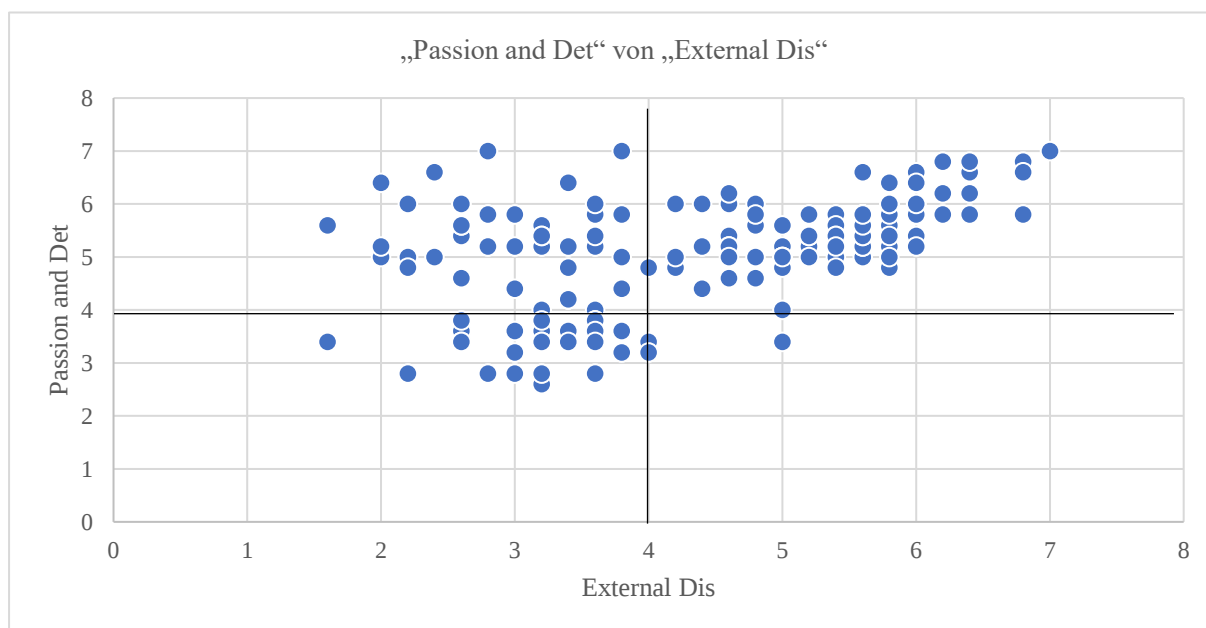
		N	%
Cases	Valid	187	100.0
	Excluded ^a	0	.0
	Total	187	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.874	5

Figure 1: Allocation of participants to one of the four biographies as to Paharia et al. (2011)



Appendix B - Chapter Sample Characteristic

Descriptives

Statistics

HD/TD/DEM/Age: [01]

N	Valid	187
	Missing	0

HD/TD/DEM/Age: [01]

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18	1	.5	.5	.5
	19	3	1.6	1.6	2.1
	20	1	.5	.5	2.7

21	14	7.5	7.5	10.2
22	10	5.3	5.3	15.5
23	7	3.7	3.7	19.3
24	3	1.6	1.6	20.9
25	17	9.1	9.1	29.9
26	39	20.9	20.9	50.8
27	9	4.8	4.8	55.6
28	12	6.4	6.4	62.0
29	11	5.9	5.9	67.9
30	6	3.2	3.2	71.1
31	18	9.6	9.6	80.7
32	8	4.3	4.3	85.0
33	5	2.7	2.7	87.7
34	6	3.2	3.2	90.9
35	3	1.6	1.6	92.5
36	2	1.1	1.1	93.6
37	1	.5	.5	94.1
39	1	.5	.5	94.7
40	4	2.1	2.1	96.8
42	1	.5	.5	97.3
45	1	.5	.5	97.9
50	1	.5	.5	98.4
51	2	1.1	1.1	99.5
53	1	.5	.5	100.0
Total	187	100.0	100.0	

HD/TD/DM/Occupation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Student	89	47.6	47.6	47.6
	Employed	79	42.2	42.2	89.8
	Entrepreneur	12	6.4	6.4	96.3
	Unemployed	7	3.7	3.7	100.0
	Total	187	100.0	100.0	

HD/TD/DM/Income

		Frequency	Percent	Valid Percent	Cumulative Percent
--	--	-----------	---------	---------------	--------------------

Valid	less than 750 ?	46	24.6	24.6	24.6
	751?-1500?	50	26.7	26.7	51.3
	1501?-2500?	32	17.1	17.1	68.4
	2501?-3500?	35	18.7	18.7	87.2
	3501?-4500?	19	10.2	10.2	97.3
	4500?+	5	2.7	2.7	100.0
	Total	187	100.0	100.0	

Appendix C - Chapter Manipulation Check

Independent sample T-Test on the item Passion & Determination

Group Statistics

	TD/UD	N	Mean	Std. Deviation	Std. Error Mean
PassionDet	0	92	6.02	.611	.064
	1	95	2.84	1.371	.141

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	t	df	Significance One- Sided p	Two- Sided p	Mean Differe nce	Std. Error Differe nce	95% Confidence Interval of the Difference	
PassionDet	Equal variances assumed	35.817	<.001	20.374	185	<.001	<.001	3.180	.156	2.872	3.488
	Equal variances not assumed			20.595	130.821	<.001	<.001	3.180	.154	2.874	3.485

Independent sample T-Test on the item External Disadvantage

Group Statistics

	TD/UD	N	Mean	Std. Deviation	Std. Error Mean
Ext.Dis	0	92	5.98	.784	.082
	1	95	2.42	1.396	.143

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means								95% Confidence Interval of the Difference	
		F	Sig.	t	df	Significance One-Sided p	Two-Sided p	Mean Difference	Std. Error Difference	Lower	Upper		
Ext .Di s	Equal variances assumed	18.619	<.001	21.391	185	<.001	<.001	3.557	.166	3.229	3.885		
	Equal variances not assumed			21.571	148.911	<.001	<.001	3.557	.165	3.231	3.883		

Reliability Test for hedonic index in the hedonic domain

Case Processing Summary

		N	%
Cases	Valid	100	53.5
	Excluded ^a	87	46.5
	Total	187	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

		Cronbach's Alpha Based on Standardized Items	N of Items
Cronbach's Alpha		.794	2

Item Statistics

	Mean	Std. Deviation	N
HJoyful	6.18	.833	100
HPleasure	6.24	.712	100

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Reliability Test for hedonic index in the utilitarian domain

Case Processing Summary

		N	%
Cases	Valid	87	46.5
	Excluded ^a	100	53.5
	Total	187	100.0
Cronbach's Alpha			
Based on			
Cronbach's Alpha		Standardized Items	N of Items
.885		.885	2

Item Statistics

	Mean	Std. Deviation	N
UJoyfull	2.47	1.218	87
UPleasure	2.33	1.207	87

Independent sample T-Test on hedonic items

Group Statistics

		TConsumptionDomain_coded	N	Mean	Std. Deviation	Std. Error Mean
THedonicIndex	0		100	6.210	.7042	.0704
	1		87	2.414	1.1443	.1227

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						95% Confidence Interval of the Difference	
		F	Sig.	t	df	Significance One- Sided p	Two- Sided p	Mean Differ ence	Std. Error Differ ence	Lower	Upper
The nic Ind ex	Equal variances assumed	7.831	.006	27.6 97	185	<.001	<.001	3.7962	.1371	3.5258	4.0666
	Equal variances not assumed			26.8 38	138. 907	<.001	<.001	3.7962	.1415	3.5165	4.0759

Independent Samples Effect Sizes

			95% Confidence Interval		
		Standardizer ^a	Point Estimate	Lower	Upper
THedonicIndex	Cohen's d	.9349	4.061	3.555	4.562
	Hedges' correction	.9387	4.044	3.541	4.544
	Glass's delta	1.1443	3.318	2.743	3.887

a. The denominator used in estimating the effect sizes.

Cohen's d uses the pooled standard deviation.

Hedges' correction uses the pooled standard deviation, plus a correction factor.

Glass's delta uses the sample standard deviation of the control group.

Reliability Test for utilitarian index in hedonic domain

Case Processing Summary

		N	%
Cases	Valid	100	53.5
	Excluded ^a	87	46.5
	Total	187	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

		Cronbach's Alpha	
		Based on	
Cronbach's Alpha	Standardized Items	N of Items	
.378	.378	2	

Item Statistics

	Mean	Std. Deviation	N
HConvenient	4.51	1.059	100
HCostEff	2.33	1.111	100

Reliability Test for utilitarian index in utilitarian domain

Case Processing Summary

		N	%
Cases	Valid	87	46.5
	Excluded ^a	100	53.5
	Total	187	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.349	.349	2

Item Statistics

	Mean	Std. Deviation	N
UConvenient	5.38	1.133	87
UCostEff	5.64	1.201	87

Independent sample T-Test on utilitarian items

Group Statistics

	TConsumptionDomain_coded	N	Mean	Std. Deviation	Std. Error Mean
Rest.Conven	1	87	5.38	1.133	.122
	0	100	3.99	1.396	.140

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						95% Confidence Interval of the Difference	
		F	Sig.	t	df	Significance One- Sided p	Two- Sided p	Mean Differ- ence	Std. Error Differ- ence	Lower	Upper
Rest. Conv	Equal variances assumed	.346	.557	7.399	185	<.001	<.001	1.389	.188	1.019	1.760
en	Equal variances not assumed			7.506	184.151	<.001	<.001	1.389	.185	1.024	1.754

Independent Samples Effect Sizes

		Standardizer ^a	Point Estimate	95% Confidence Interval	
Rest.Conven	Cohen's d	1.281	1.085	.776	1.391
	Hedges' correction	1.286	1.080	.772	1.386
	Glass's delta	1.396	.995	.674	1.312

a. The denominator used in estimating the effect sizes.

Cohen's d uses the pooled standard deviation.

Hedges' correction uses the pooled standard deviation, plus a correction factor.

Glass's delta uses the sample standard deviation of the control group.

Group Statistics

	TConsumptionDomain_coded	N	Mean	Std. Deviation	Std. Error Mean
Rest.CostEff	1	87	5.64	1.201	.129
	0	100	2.33	1.111	.111

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means						95% Confidence Interval of the Difference	
		F	Sig.	t	df	Significance One-Sided p	Significance Two-Sided p	Mean Difference	Std. Error Difference	Lower	Upper
Rest.CostEff	Equal variances assumed	.413	.521	19.598	185	<.001	<.001	3.314	.169	2.980	3.647
	Equal variances not assumed			19.492	176.661	<.001	<.001	3.314	.170	2.978	3.649

Independent Samples Effect Sizes

		Standardizer ^a	Point Estimate	95% Confidence Interval	
				Lower	Upper
Rest.CostEff	Cohen's d	1.153	2.873	2.461	3.281
	Hedges' correction	1.158	2.862	2.451	3.268
	Glass's delta	1.111	2.984	2.476	3.486

a. The denominator used in estimating the effect sizes.

Cohen's d uses the pooled standard deviation.

Hedges' correction uses the pooled standard deviation, plus a correction factor.

Glass's delta uses the sample standard deviation of the control group.

Appendix D - Main Results

ANOVA – Hypothesis 1

Assumption Check

Case Processing Summary

	Valid		Cases Missing		Total	
	N	Percent	N	Percent	N	Percent
Residual for Attitude	187	100.0%	0	0.0%	187	100.0%

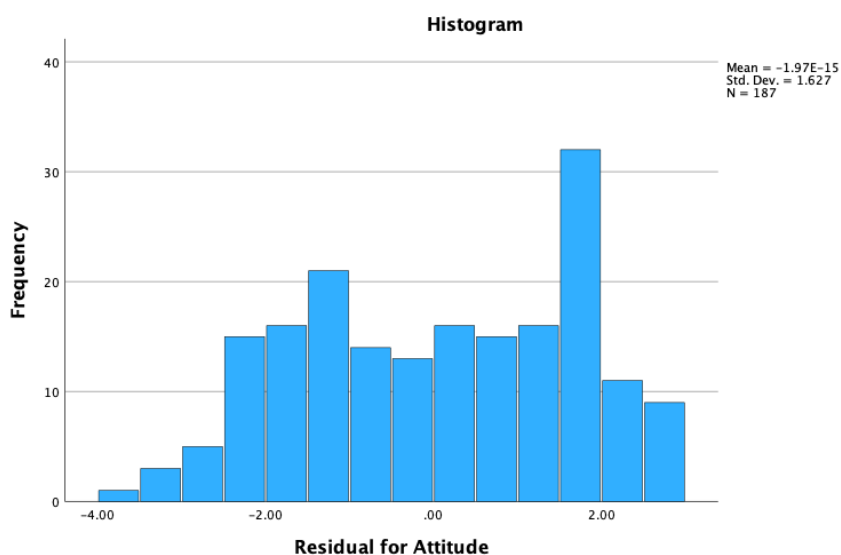
Descriptives

			Statistic	Std. Error
Residual for Attitude	Mean		.0000	.11895
	95% Confidence Interval for Mean	Lower Bound	-.2347	
		Upper Bound	.2347	
	5% Trimmed Mean		.0221	
	Median		.0353	
	Variance		2.646	
	Std. Deviation		1.62660	
	Minimum		-3.83	
	Maximum		2.73	
	Range		6.56	
	Interquartile Range		2.86	
	Skewness		-.165	.178
	Kurtosis		-1.127	.354

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Residual for Attitude	.105	187	<.001	.956	187	<.001

a. Lilliefors Significance Correction



ANOVA with sample size N = 187

Between-Subjects Factors

		N
ParticipantsBio	1.00	105
	2.00	33
	3.00	3
	4.00	46
QnrTypeBinary	0	87
	1	100

Descriptive Statistics

Dependent Variable: Attitude

ParticipantsBio	QnrTypeBinary	Mean	Std. Deviation	N
1.00	0	4.4383	1.68338	54
	1	4.2735	1.73410	51
	Total	4.3583	1.70197	105
2.00	0	4.8329	2.27844	14
	1	2.9647	1.16377	19
	Total	3.7573	1.93646	33
3.00	0	7.0000	.00000	2
	1	2.6700	.	1
	Total	5.5567	2.49993	3
4.00	0	4.0776	1.47021	17
	1	4.1483	1.52511	29
	Total	4.1222	1.48896	46
Total	0	4.4902	1.77037	87
	1	3.9725	1.64031	100
	Total	4.2134	1.71706	187

Levene's Test of Equality of Error Variances^{a,b}

		Levene Statistic	df1	df2	Sig.
Attitude	Based on Mean	4.828	6	179	<.001
	Based on Median	2.611	6	179	.019
	Based on Median and with adjusted df	2.611	6	103.730	.021
	Based on trimmed mean	4.623	6	179	<.001

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Dependent variable: Attitude

b. Design: Intercept + ParticipantsBio + OwnersBio + ParticipantsBio * OwnersBio

Tests of Between-Subjects Effects

Dependent Variable: Attitude

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	56.261 ^a	7	8.037	2.923	.006
Intercept	674.301	1	674.301	245.264	<.001
ParticipantsBio	6.760	3	2.253	.820	.485
OwnersBio	22.554	1	22.554	8.204	.005
ParticipantsBio * OwnersBio	31.265	3	10.422	3.791	.011
Error	492.122	179	2.749		
Total	3868.097	187			
Corrected Total	548.383	186			

a. R Squared = .103 (Adjusted R Squared = .068)

ANOVA Assumption Check sample N = 184

Case Processing Summary

	Valid		Cases Missing		Total	
	N	Percent	N	Percent	N	Percent
Residual for Attitude	184	100.0%	0	0.0%	184	100.0%

Descriptives

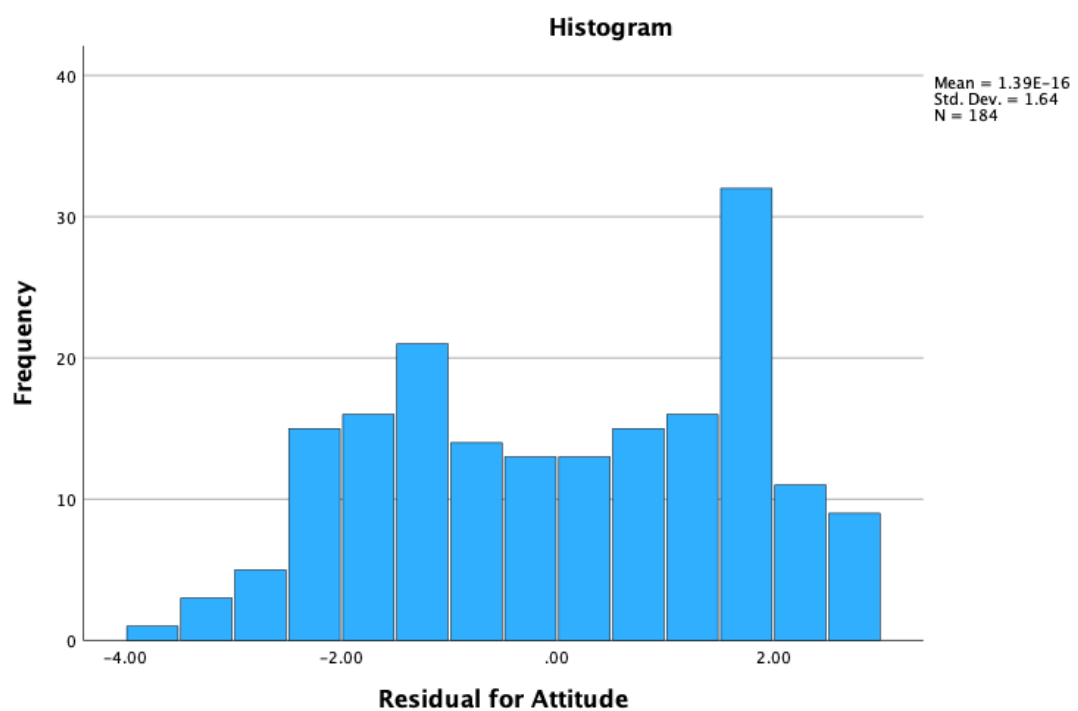
		Statistic	Std. Error
Residual for Attitude	Mean	.0000	.12089
	95% Confidence Interval for Mean	Lower Bound	-.2385
		Upper Bound	.2385
	5% Trimmed Mean	.0223	
	Median	.0565	
	Variance	2.689	
	Std. Deviation	1.63988	

Minimum	-3.83	
Maximum	2.73	
Range	6.56	
Interquartile Range	2.94	
Skewness	-.164	.179
Kurtosis	-1.158	.356

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Residual for Attitude	.107	184	<.001	.953	184	<.001

a. Lilliefors Significance Correction



ANOVA sample N = 184

Between-Subjects Factors

		N
ParticipantsBio	1.00	105
	2.00	33

	4.00	46
QnrTypeBinary	0	85
	1	99

Descriptive Statistics

Dependent Variable: Attitude

ParticipantsBio	QnrTypeBinary	Mean	Std. Deviation	N
1.00	0	4.4383	1.68338	54
	1	4.2735	1.73410	51
	Total	4.3583	1.70197	105
2.00	0	4.8329	2.27844	14
	1	2.9647	1.16377	19
	Total	3.7573	1.93646	33
4.00	0	4.0776	1.47021	17
	1	4.1483	1.52511	29
	Total	4.1222	1.48896	46
Total	0	4.4312	1.74795	85
	1	3.9857	1.64335	99
	Total	4.1915	1.70243	184

Levene's Test of Equality of Error Variances^{a,b}

		Levene Statistic	df1	df2	Sig.
Attitude	Based on Mean	4.239	5	178	.001
	Based on Median	2.139	5	178	.063
	Based on Median and with adjusted df	2.139	5	103.730	.067
	Based on trimmed mean	4.032	5	178	.002

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Dependent variable: Attitude

b. Design: Intercept + ParticipantsBio + OwnersBio + ParticipantsBio * OwnersBio

Tests of Between-Subjects Effects

Dependent Variable: Attitude

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	65.131 ^a	8	8.141	3.077	.003
Intercept	166.380	1	166.380	62.877	<.001
Gender	.413	1	.413	.156	.693
Age	22.815	1	22.815	8.622	.084
income	3.570	1	3.570	1.349	.247
OwnersBio	15.099	1	15.099	5.706	.018
ParticipantsBio	6.464	2	3.232	1.221	.297
OwnersBio * ParticipantsBio	24.409	2	12.204	4.612	.011
Error	460.423	174	2.646		
Total	3758.968	183			
Corrected Total	525.554	182			

a. R Squared = .124 (Adjusted R Squared = .084)

Simple Main Effect Analysis Hypothesis 1

1. QnrTypeBinary

Estimates

Dependent Variable: Attitude

QnrTypeBinary	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
0	4.450	.214	4.028	4.871
1	3.796	.181	3.438	4.153

Pairwise Comparisons

Dependent Variable: Attitude

(I) QnrTypeBinary	(J) QnrTypeBinary	Mean Difference (I- J)	Std. Error	Sig. ^b	95% Confidence Interval for Difference ^b	
					Lower Bound	Upper Bound
0	1	.654*	.280	.021	.101	1.207
1	0	-.654*	.280	.021	-1.207	-.101

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Univariate Tests

Dependent Variable: Attitude

	Sum of Squares	df	Mean Square	F	Sig.
Contrast	15.071	1	15.071	5.451	.021
Error	492.122	178	2.765		

The F tests the effect of QnrTypeBinary. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

3. QnrTypeBinary * ParticipantsBio

Estimates

Dependent Variable: Attitude

QnrTypeBinary	ParticipantsBio	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Underdog	Underdog	4.438	.226	3.992	4.885
	Top Do	4.833	.444	3.956	5.710
	Priv. Achiever	4.078	.403	3.282	4.873
Top Dog	Underdog	4.274	.233	3.814	4.733
	Top Do	2.965	.381	2.212	3.718
	Priv. Achiever	4.148	.309	3.539	4.758

Pairwise Comparisons

Dependent Variable: Attitude

Participant sBio	(I) QnrTypeBin ary	(J) QnrTypeBin ary	Mean Difference (I-J)	Std. Error	Sig. ^b	95% Confidence Interval for Difference ^b	
						Lower Bound	Upper Bound
Underdog	Underdog	Top Dog	.165	.325	.612	-.476	.805
	Top Dog	Underdog	-.165	.325	.612	-.805	.476
Top Dog	Underdog	Top Dog	1.868*	.586	.002	.712	3.024
	Top Dog	Underdog	-1.868*	.586	.002	-3.024	-.712
Priv. Achiever	Underdog	Top Dog	-.071	.508	.890	-1.073	.932
	Top Dog	Underdog	.071	.508	.890	-.932	1.073

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Univariate Tests

Dependent Variable: Attitude

ParticipantsBio		Sum of Squares	df	Mean Square	F	Sig.
1.00	Contrast	.712	1	.712	.258	.612
	Error	492.122	178	2.765		
2.00	Contrast	28.130	1	28.130	10.175	.002
	Error	492.122	178	2.765		
4.00	Contrast	.053	1	.053	.019	.890
	Error	492.122	178	2.765		

Each F tests the simple effects of QnrTypeBinary within each level combination of the other effects shown. These tests are based on the linearly independent pairwise comparisons among the estimated marginal means.

ANOVA – Hypothesis 2

Between-Subjects Factors

		N
QnrTypeBinary	Top Dog	87
	Underdog	100
ConDomBinary	Utilitarian	95
	Hedonic	92

Descriptive Statistics

Dependent Variable: EatingIndexTDHed

QnrTypeBinary	ConDomBinary	Mean	Std. Deviation	N
Top Dog	Utilitarian	5.7830	1.31111	40
	Hedonic	3.3900	1.30847	47
	Total	4.4902	1.77037	87
Underdog	Utilitarian	2.8549	1.04826	55
	Hedonic	5.3384	1.11169	45
	Total	3.9725	1.64031	100
Total	Utilitarian	4.0878	1.85922	95
	Hedonic	4.3430	1.55631	92
	Total	4.2134	1.71706	187

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Attitude toward shop	.073	187	.017	.986	187	.068

a. Lilliefors Significance Correction

Tests of Between-Subjects Effects

Dependent Variable: Attitude

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	278.785 ^a	6	46.464	33.139	<.001
Intercept	132.456	1	132.456	94.470	<.001
Gender	.374	1	.374	.267	.606
Age	4.158	1	4.158	2.965	.087
income	.001	1	.001	.001	.982
OwnersBio	8.954	1	8.954	6.386	.012
Consumption	.055	1	.055	.039	.843
OwnersBio * Consumption	245.313	1	245.313	174.962	<.001
Error	245.313	183	1.402		
Total	3758.968	187			
Corrected Total	525.554	186			

a. R Squared = .530 (Adjusted R Squared = .514)

Simple Main Effect Analysis

1. Owners Biography

Estimates

Dependent Variable: EatingIndexTDHed

QnrTypeBinary	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
Underdog	4.587	.128	4.334	4.839
Top Dog	4.097	.120	3.861	4.333

Pairwise Comparisons

Dependent Variable: EatingIndexTDHed

(I) QnrTypeBinary	(J) QnrTypeBinary	Mean Difference (I-J)	Std. Error	Sig. ^b	95% Confidence Interval for Difference ^b	
					Lower Bound	Upper Bound
Top Dog	Underdog	.490*	.175	.006	.144	.836
Underdog	Top Dog	-.490*	.175	.006	-.836	-.144

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Univariate Tests

Dependent Variable: EatingIndexTDHed

	Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Contrast	11.072	1	11.072	7.807	.006	.041
Error	259.512	183	1.418			

The F tests the effect of QnrTypeBinary. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

2. Owners Biography x Consumption Domain

Dependent Variable: Attitude towards shop

QnrTypeBinary	ConDomBinary	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Top Dog	Utilitarian	5.783	.188	5.412	6.154
	Hedonic	3.390	.174	3.047	3.733
Underdog	Utilitarian	2.855	.161	2.538	3.172
	Hedonic	5.338	.178	4.988	5.689

Pairwise Comparisons

Dependent Variable: Attitude towards shop

ConDomBinary	(I)	(J)	Mean Difference (I-J)	Std. Error	Sig. ^b	95% Confidence Interval for Difference ^b	
	QnrTypeBinary	QnrTypeBinary				Lower Bound	Upper Bound
Utilitarian	Top Dog	Underdog	2.928*	.247	<.001	2.440	3.416
	Underdog	Top Dog	-2.928*	.247	<.001	-3.416	-2.440
Hedonic	Top Dog	Underdog	-1.948*	.248	<.001	-2.438	-1.458
	Underdog	Top Dog	1.948*	.248	<.001	1.458	2.438

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Univariate Tests

Dependent Variable: Attitude towards shop

ConDomBinary		Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Utilitarian	Contrast	198.549	1	198.549	140.011	<.001	.433
	Error	259.512	183	1.418			
Hedonic	Contrast	87.277	1	87.277	61.545	<.001	.252
	Error	259.512	183	1.418			

Each F tests the simple effects of QnrTypeBinary within each level combination of the other effects shown. These tests are based on the linearly independent pairwise comparisons among the estimated marginal means.

Estimates

Dependent Variable: Attitude towards shop

QnrTypeBinary	ConDomBinary	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
Top Dog	Utilitarian	5.783	.188	5.412	6.154
	Hedonic	3.390	.174	3.047	3.733
Underdog	Utilitarian	2.855	.161	2.538	3.172
	Hedonic	5.338	.178	4.988	5.689

Pairwise Comparisons

Dependent Variable: Attitude towards shop

QnrTypeBinary	(I) ConDomBinary	(J) ConDomBinary	Mean Difference (I-J)	Std. Error	Sig. ^b	95% Confidence Interval for Difference ^b	
						Lower Bound	Upper Bound
Top Dog	Utilitarian	Hedonic	2.393*	.256	<.001	1.888	2.898
	Hedonic	Utilitarian	-2.393*	.256	<.001	-2.898	-1.888
Underdog	Utilitarian	Hedonic	-2.484*	.239	<.001	-2.956	-2.011
	Hedonic	Utilitarian	2.484*	.239	<.001	2.011	2.956

Based on estimated marginal means

*. The mean difference is significant at the .05 level.

b. Adjustment for multiple comparisons: Least Significant Difference (equivalent to no adjustments).

Univariate Tests

Dependent Variable: Attitude towards shop

QnrTypeBinary		Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Top Dog	Contrast	123.744	1	123.744	87.260	<.001	.323
	Error	259.512	183	1.418			
Underdog	Contrast	152.657	1	152.657	107.649	<.001	.370
	Error	259.512	183	1.418			

Each F tests the simple effects of ConDomBinary within each level combination of the other effects shown. These tests are based on the linearly independent pairwise comparisons among the estimated marginal means.

Appendix E – Survey

Please note that two variables have been manipulated, consumption domain and owner biography, a total of four conditions and four different survey paths result. Each path is depicted below.

Path 1 – Hedonic / Underdog

Page 1 Introduction

Dear participant,

Welcome to the online survey as part of my Master's thesis. I am very pleased that you have taken the time to participate in this survey and thus support my research. The following study focuses on consumer behavior and is conducted by the Department of Economics at the University of Vienna.

The survey will take less than **5 minutes** to complete.

Please note:

- ☐ It is important that you answer the questions very carefully to ensure meaningful results.
- ☐ There is no right or wrong answer. I am interested in your individual assessment.
- ☐ There is no time limit on this survey.
- ☐ This survey is anonymous.

If you have any questions, please don't hesitate to contact me (axxxx@unet.univie.ac.at).

Best,

Jacek Kalita

Thank you for the Participation!

Page 2 Hedonic Consumption Domain

Read carefully and imagine following scenario:

You like to eat out. You are new to the area and are looking for information about restaurants in your area. You scan the local newspaper, find a restaurant that suits

Page 3 Hedonic Underdog Biography

The owner started this business with very limited management resources. He has had to overcome many difficulties and obstacles due to limited financial resources and poor personal connections. The owner feels that competition in this industry is fierce. However, he believes that his dream will come true and that he can be successful in the future if he continues to intensify his efforts to satisfy customers. He feels it is important to continue to take on new challenges in this business and is definitely not satisfied with the current situation.

You are hungry and crave good food, please imagine the situation above. This is all the information you have.

Answer following statements as precise as you can:

I would like to eat at this restaurant	not at all _ _ _ _ _ very much
I might be interested in eating at this restaurant	not at all _ _ _ _ _ very much
Based on the statement of the owner, I think this restaurant is good	not at all _ _ _ _ _ very much

Page 4 Manipulation Check Owner's Underdog Disposition

Recall:

The owner started this business with very limited management resources. He has had to overcome many difficulties and obstacles due to limited financial resources and poor personal connections. The owner feels that competition in this industry is fierce. However, he believes that his dream will come true and that he can be successful in the future if he continues to intensify his efforts to satisfy customers. He feels it is important to continue to take on new challenges in this business and is definitely not satisfied with the current situation.

Answer following statements as precise as you can:

The owner of the restaurant shows passion and determination towards his/her business	not at all _ _ _ _ _ very much
The owner of the restaurant faces external challenges running his/her business	not at all _ _ _ _ _ very much

Page 5 Participants Underdog Disposition (Passion and Determination)

Answer following statements as precise as you can:

I always stay determined even when I lose.	not at all _ _ _ _ _ very much
Compared to others I am more passionate about my goals.	not at all _ _ _ _ _ very much
When others expect me to fail, I do not quit.	not at all _ _ _ _ _ very much
Compared to others I do not give up easily.	not at all _ _ _ _ _ very much
When I encounter obstacles, I usually quit.	not

Page 6 Participants Underdog Disposition (External Disadvantage)

I started from a disadvantaged position in meeting my goals compared to my peers.	not at all	_____	very much
I've had to struggle more than others to get to where I am in my life.	not at all	_____	very much
I've often felt like I'm a minority trying to break in.	not at all	_____	very much
I often feel I have to fight against more discrimination compared to others.	not at all	_____	very much
Some people are jealous of me because of my privileged background.	not at all	_____	very much

Page 7 Manipulation Check Consumption Domain

Think of a restaurant

...and all things you associate with it

Answer following statements as precise as you can:

Going to the restaurant makes my life more joyful	not at all	_____	very much
Going to the restaurant brings me pleasure	not at all	_____	very much
I think going to the restaurant is very convenient	not at all	_____	very much
Going to the restaurant is cost-efficient	not at all	_____	very much

Page 8 Demographics

What is your gender?

Female/male/divers

How old are you?

What is your occupation?

Student/Employed/Entrepreneur/Unemployed/Retired

What is your monthly net income?

The amount of money left each month after taxes

less than 750 €/751€-1500€/1501€-2500€/2501€-3500€/3501€-4500€/4500€+

Path 2 – Hedonic / Top Dog

Page 1 Introduction

Same for all conditions (see above)

Page 2 – Hedonic Consumption Domain

Read carefully and imagine following scenario:

You like to eat out. You are new to the area and are looking for information about restaurants in your area. You scan the local newspaper, find a restaurant that suits your taste, and see the owner's introduction in the article.

Page 3 - Hedonic Top Dog Biography

The owner started this business with extensive management resources because he had been successful in other industries. Because of his financial resources and extensive personal connections, the business is doing very well. The owner feels that competition in this industry is not intense. He is satisfied with the current situation and does not feel the need to challenge himself by doing something new in this business or changing the current way of running his business.

You are hungry and crave good food, please imagine the situation above. This is all the information you have.

Answer following statements as precise as you can:

I would like to eat at this restaurant	not at all	_____	very much
I might be interested in eating at this restaurant	not at all	_____	very much
Based on the statement of the owner,	not at all	_____	very much
I think this restaurant is good			

Page 4 Manipulation Check Owner's Top Dog Disposition

Recall:

The owner started this business with extensive management resources because he had been successful in other industries. Because of his financial resources and extensive personal connections, the business is doing very well. The owner feels that competition in this industry is not intense. He is satisfied with the current situation and does not feel the need to challenge himself by doing something new in this business or changing the current way of running his business.

Answer following statements as precise as you can:

The owner of the restaurant shows passion and determination towards his/her business	not at all	_____	very much
The owner of the restaurant faces external challenges running his/her business	not at all	_____	very much

Page 5 Participants Underdog Disposition (Passion and Determination)

Same for all conditions (see above)

Page 6 Participants Underdog Disposition (External Disadvantage)

Same for all conditions (see above)

Page 7 Manipulation Check Consumption Domain

Think of a restaurant

...and all things you associate with it

Answer following statements as precise as you can:

Going to the restaurant makes my life more joyful	not at all	_____	very much
Going to the restaurant brings me pleasure	not at all	_____	very much
I think goingt to the restaurant is very convenient	not at all	_____	very much
Going to the restaurant is cost-efficient	not at all	_____	very much

Page 8 Demographics

Same for all conditions (see above)

Path 3 – Utilitarian / Underdog

Page 1 Introduction

Same for all conditions (see above)

Page 2 – Utilitarian Consumption Domain

Read carefully and imagine following scenario:

A microwave oven you have been using at home has broken down. You decide to buy a new one because it is inconvenient not to have one. However, you have only recently moved to your current area and do not know where the electronics shops are. While scanning the Internet for an electronics roe near you home, you find a page that introduces the owner of an electronics store.

Page 3 Utilitarian Underdog Biography

The owner started this business with very limited management resources. He has had to overcome many difficulties and obstacles due to limited financial resources and poor personal connections. The owner feels that competition in this industry is fierce. However, he believes that his dream will come true and that he can be successful in the future if he continues to intensify his efforts to satisfy customers. He feels it is important to continue to take on new challenges in this business and is definitely not satisfied with the current situation.

Your microwave is broken and you need a new one, please imagine yourself in the situation above. You only have the above information.

Answer following statements as precise as you can:

I would like to buy a microwave in this store	not at all	_____	very much
This store appears interesting to me	not at all	_____	very much
Based on the statement of the owner,			
I think this store is good	not at all	_____	very much

Page 4 Manipulation Check Owner's Underdog Disposition

Recall:

The owner started this business with very limited management resources. He has had to overcome many difficulties and obstacles due to limited financial resources and poor personal connections. The owner feels that competition in this industry is fierce. However, he believes that his dream will come true and that he can be successful in the future if he continues to intensify his efforts to satisfy customers. He feels it is important to continue to take on new challenges in this business and is definitely not satisfied with the current situation.

Answer following statements as precise as you can:

The owner of the store shows passion and determination towards his/her business	not at all	_____	very much
The owner of the store faces external challenges running his/her business	not at all	_____	very much

Page 5 Participants Underdog Disposition (Passion and Determination)

Same for all conditions (see above)

Page 6 Participants Underdog Disposition (External Disadvantage)

Same for all conditions (see above)

Page 7 Manipulation Check Consumption Domain

Think of a microwave

...and all things you associate with it

Answer following statements as precise as you can:

Using a microwave makes my life more joyful	not at all	_____	very much
Using a microwave brings me pleasure	not at all	_____	very much
I think using a microwave is very convenient	not at all	_____	very much
Using a microwave cost-efficient	not at all	_____	very much

Page 8 Demographics

Same for all conditions (see above)

Path 4 – Utilitarian / Top Dog

Page 1 Introduction

Same for all conditions (see above)

Page 2 – Utilitarian Consumption Domain

Read carefully and imagine following scenario:

A microwave oven you have been using at home has broken down. You decide to buy a new one because it is inconvenient not to have one. However, you have only recently moved to your current area and do not know where the electronics shops are. While scanning the Internet for an electronics store near your home, you find a page that introduces the owner of an electronics store.

Page 3 Utilitarian Top Dog Biography

The owner started this business with extensive management resources because he had been successful in other industries. Because of his financial resources and extensive personal connections, the business is doing very well. The owner feels that competition in this industry is not intense. He is satisfied with the current situation and does not feel the need to challenge himself by doing something new in this business or changing the current way of running his business.

Your microwave is broken and you need a new one, please imagine yourself in the situation above. You only have the above information.

Answer following statements as precise as you can:

I would like to buy a microwave in this store	not at all	_____	very much
This store appears interesting to me	not at all	_____	very much
Based on the statement of the owner, I think this store is good	not at all	_____	very much

Page 4 Manipulation Check Owner's Underdog Disposition

Recall:

The owner started this business with very limited management resources. He has had to overcome many difficulties and obstacles due to limited financial resources and poor personal connections. The owner feels that competition in this industry is fierce. However, he believes that his dream will come true and that he can be successful in the future if he continues to intensify his efforts to satisfy customers. He feels it is important to continue to take on new challenges in this business and is definitely not satisfied with the current situation.

Answer following statements as precise as you can:

The owner of the store shows passion and
determination towards his/her business not at all _ _ _ _ _ very much

The owner of the store faces external challenges
running his/her business not at all _ _ _ _ _ very much

Page 5 Participants Underdog Disposition (Passion and Determination)

Same for all conditions (see above)

Page 6 Participants Underdog Disposition (External Disadvantage)

Same for all conditions (see above)

Page 7 Manipulation Check Consumption Domain

Think of a microwave

...and all things you associate with it

Answer following statements as precise as you can:

Using a microwave makes my life more joyful not at all _ _ _ _ _ very much

Using a microwave brings me pleasure not at all _ _ _ _ _ very much

I think using a microwave is very convenient not at all _ _ _ _ _ very much

Using a microwave cost-efficient not at all _ _ _ _ _ very much

Page 8 Demographics

Same for all conditions (see above)

Appendix F – Abstract – English – German

Abstract

The underdog effect, whereby entities perceived as less likely to succeed attract greater support, is a widely used strategy in sports, politics, and business. This study examines the impact of different consumption domains, hedonic and utilitarian, on the underdog effect. Using a microwave oven as utilitarian and a restaurant as hedonic, this paper demonstrates a moderating effect of the consumption domain. The results, derived from a survey of 187 participants, show that consumers prefer the underdog for hedonic consumption and the top dog for utilitarian products. Understanding these dynamics is crucial for effectively exploiting the underdog effect.

Zusammenfassung

Der Underdog-Effekt, bei dem Unternehmen, die als weniger erfolgsversprechend gelten, mehr Unterstützung erhalten, ist eine weit verbreitete Strategie im Sport, in der Politik und in der Wirtschaft. Diese Studie untersucht den Einfluss verschiedener Konsumdomänen, hedonistischer und utilitaristischer Art, auf den Underdog-Effekt. Unter Verwendung eines Mikrowellenherds als utilitaristischem und eines Restaurants als hedonistischem Ansatz demonstriert dieser Artikel eine moderierende Wirkung des Konsumbereichs. Die Ergebnisse einer Umfrage unter 187 Teilnehmern zeigen, dass Verbraucher den Underdog für hedonistischen Konsum und den Top Dog für Gebrauchsprodukte bevorzugen. Das Verständnis dieser Dynamik ist entscheidend, um den Underdog-Effekt effektiv nutzen zu können.