|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Leeds University**  **Business School** | |  | | | | | | | | |
| **Dissertation/Project Coversheet** | | | | | | | | | | |
|  | | | | | | | | | | |
| Student ID Number: | 2 | | 0 | 1 | 3 | 9 | 9 | 1 | 3 | 6 |
| Student Name | Syed Comail Ali Rizvi | | | | | | | | | |
| Module Code: | LUBS3303 | | | | | | | | | |
| Programme of Study: | BSc Business Economics | | | | | | | | | |
| Supervisor: | Dr. Alan Piper | | | | | | | | | |
| Title: | Can Behavioural Economics be used to explain advertising effectiveness? | | | | | | | | | |
| Declared Word Count: | 7914 | | | | | | | | | |
| Please Note:  Your declared word count must be accurate, and should not mislead. Making a fraudulent statement concerning the work submitted for assessment could be considered academic malpractice and investigated as such.  If the amount of work submitted is higher than that specified by the word limit or that declared on your word count, this may be reflected in the mark awarded and noted through individual feedback given to you.  It is not acceptable to present matters of substance, which should be included in the main body of the text, in the appendices (“appendix abuse”).  It is not acceptable to attempt to hide words in graphs and diagrams; only text which is strictly necessary should be included in graphs and diagrams. | | | | | | | | | | |
| By submitting an assignment you confirm you have read and understood the University of Leeds [**Declaration of Academic Integrity**](http://www.leeds.ac.uk/secretariat/documents/academic_integrity.pdf) ( <http://www.leeds.ac.uk/secretariat/documents/academic_integrity.pdf>). | | | | | | | | | | |

Contents

[**Introduction** 3](#_Toc134664400)

[**Literature Review** 3](#_Toc134664401)

[**Loss Aversion:** 3](#_Toc134664402)

[**Ambiguity Aversion:** 4](#_Toc134664403)

[**Social Norms:** 5](#_Toc134664404)

[**Behavioural Economics and Marketing:** 6](#_Toc134664405)

[**Methodology** 7](#_Toc134664406)

[**Relevant Studies:** 7](#_Toc134664407)

[**Process:** 7](#_Toc134664408)

[**Analysis** 9](#_Toc134664409)

[**1. Coca Cola:** 9](#_Toc134664410)

[**Context:** 9](#_Toc134664411)

[**Analysis** 9](#_Toc134664412)

[**2. Nike:** 13](#_Toc134664413)

[**Context:** 13](#_Toc134664414)

[**Analysis:** 13](#_Toc134664415)

[**3. De Beers** 19](#_Toc134664416)

[**Context:** 19](#_Toc134664417)

[**Analysis:** 19](#_Toc134664418)

[**Discussion** 23](#_Toc134664419)

[**Advertisement Similarities:** 25](#_Toc134664420)

[**Advertisement Differences:** 26](#_Toc134664421)

[**Future research:** 27](#_Toc134664422)

[**Limitations** 27](#_Toc134664423)

[**Conclusion** 28](#_Toc134664424)

[**References** 29](#_Toc134664425)

[**Appendices** 40](#_Toc134664426)

[**Appendix A:** 40](#_Toc134664427)

[**Appendix B:** 42](#_Toc134664428)

# 

**Can Behavioural Economics be used to explain advertising effectiveness?**

# **Introduction**

Neoclassical Economics (NE) assumes “Homo Economics”: a rational, selfish, utility-driven individual (Arnsperger et al., 2006; Mill, 2009). Behavioural Economics (BE), on the other hand, challenges this, not completely refuting NE, instead using experiments to build on the models and modify the assumptions of rationality and standard preferences. This dissertation uses the concepts of loss-aversion, ambiguity-aversion, and social norms, as formalised by BE, to explain advertising effectiveness. It uses the advertisements of three companies, Coca-Cola, Nike, and De Beers, and uses a discourse analysis to evaluate the presence and effectiveness of said concepts.

Existing literature tends to consider the BE concepts in a strictly quantitative sense, usually in the contexts of gain-loss prospects. This dissertation aims to explore the wider applications of these concepts, in a qualitative manner. In doing so, it adds to the currently limited literature that considers BE in the promotional aspects of marketing, mainly advertising. By assessing the sales/growth figures of the brands and products advertised, there is evidence that BE can be used to explain the success of advertisements, however, this is a theoretical conclusion and requires experimentation to validate. It is also important to mention that the goal of this dissertation is to provide examples of how BE concepts are (and can be) effectively implemented in advertising. While understanding the limited generalisability, because of the qualitative analysis and selection process, it provides interesting conclusions that can be tested with future research, and potentially bring about changes in advertising and marketing practices, with the implementation of BE.

# **Literature Review**

## **Loss Aversion:**

Kahneman and Tversky (1979) theorised that individuals judge gains and losses based on a status-quo dependent reference point, and that people place greater weights on losses than gains. Therefore, loss-aversion dictates that decisions are not utility-based (as NE assumes), but also consider status-quo, and the pain or joy of losing or gaining respectively. This theory, however, was limited to situations with symmetric gains and losses. Tversky and Kahneman (1992) improved this with Cumulative Prospect Theory (CPT), which considers the value of the prospect and the probability weightings associated with gains and losses. CPT’s applicability is shown by Schmidt and Zank’s (2005) experiments, which found that given two lotteries, people were more likely to choose whichever has the smallest potential loss. Their findings prove the conclusions of CPT with subjects choosing the prospects with the smallest potential loss, regardless of what the associated potential gains were.

The reference point itself, however, is argued in the literature. Original CPT suggests that it is decided by status-quo, which is an accumulation of experiences, social norms and current (physical, mental, financial) position. Alternatively, Koszegi and Rabin’s (2006) approach suggests this is too reductive. They conclude that the reference point is developed based on beliefs of future outcomes, such as expected salary. This is a valued addition, as it allows loss-aversion to be applicable in situations where the status-quo remains unchanged, but where losses are still painful. One limitation, however, is that they assume that individuals have complete rationality and predictive power, which BE shows - through its formalisation of biases and heuristics – is an oversimplification. However, this expectation-based model remains valid, being used for a variety of loss-aversion research (see Herweg, 2013; Karle and Peitz, 2014; Dato et al., 2017).

## **Ambiguity Aversion:**

Ellsberg (1961) conducted an experiment with two urns, each containing a hundred balls of two different colours. Participants were asked to bet on a colour and urn. The distribution of colours was known for one urn and unknown for the other. Despite an equal mathematical probability of winning, subjects avoided the urn with the unknown probability. He concluded that in situations of ambiguity, people revert to past experiences and knowledge to make judgements which leads to ambiguity-aversion. Schmeidler (1989) formalised ambiguity-aversion mathematically, attributing the irrational decision-making to subjective probabilities in uncertain situations. Like Ellsberg, he concluded that the subjectivity is a result of personal beliefs and past experiences, and that greater uncertainty leads to greater ambiguity-aversion. On the other hand, Cerreia at al. (2008) argue that ambiguity-aversion in experiments arises because decision makers believe the “game” is manipulated against them, therefore, they bet on certainties. While an interesting proposition, their suggestions cannot explain why ambiguity-aversion is discernible in other contexts. Halevy (2007) offers another explanation, concluding that 95% of subjects that found it difficult to calculate objective probabilities for the prospects, exhibited ambiguity-aversion, suggesting it is a cognitive bias. Interestingly, an experiment by Sarin and Weber (1993) somewhat contradicts this. They asked experienced businesspeople to trade in clearly defined and relatively uncertain bets. Even under a market structure, experienced professionals chose to price the uncertain bets lower than the certain ones.

This leads to the question whether ambiguity-aversion is a general bias or if it is context dependent. Fox and Tversky (1995) argue for the former, suggesting that ambiguity-aversion is generally applicable but “inherently comparative” (p.600). While all these conclusions are correct for their contexts, they do not differentiate between risk, uncertainty, and ambiguity. I argue that these concepts are different and suggest that when ambiguity is purposely created in a situation, it should be considered as an endogenous quality. Therefore, irrational individuals react to this by defaulting to heuristics and therefore are ambiguity-averse (Al-Najjar and Weinstein, 2009; Zhang, 2022).

## **Social Norms:**

Social Norms refer to beliefs and behaviours that generally accepted. These can be as simple as the words people use, the clothes they wear or even something such as the punctuality expectations in a workplace. They often do not have any concrete reasoning or justification and are usually a (conscious or unconscious) collective acceptance of an idea or belief (Bourdieu, 1984).

The development of a social norm is debated: some conclude they emerge by accident (Schelling, 1978; Sugden, 1989); whereas other believe changes in individual behaviours have ripple effects over time (Sethi, 1996; Young, 1998). Though these conclusions may seem reductive, they are difficult to disprove and possibly correct in certain contexts. Consequently, Rimal and Storey (2020) suggest three ways social norms may spread amongst a society:

1. Shared experiences with family, friends, and co-workers.
2. Symbolically, through media.
3. Imaginatively,
   1. By rationalising internalised ideas based on context.

These follow on from the previous literature. The first point explains how individual behaviours may have community-wide effects, and the inclusion of media in the second explains how norms develop at a societal, or global level. However, I would argue that the last point is really an extension of the first: instead of people self-rationalising their imaginations, the behaviours of others dictate their own conformity to norms. This explains how people may conform to norms in different situations, even though they may be different to their own understanding or beliefs.

The reason people conform to social norms is best described by Elster (1989): not adhering to norms often results in retaliation or seclusion. Festre (2010) supports this, finding that indefinite seclusions from groups is possibly the most effective method to get people to adhere to social norms. Additionally, donation experiments show that the anonymous donations are lower, yet those same people will donate as much as possible when names and donations are visible (Gachter and Fehr, 1999; Rege and Telle 2001). Hence, another reason people may conform to social norms may be to avoid humiliation or from personal feelings of remorse for not following them.

## **Behavioural Economics and Marketing:**

Despite BE’s formalisation of why and how biases and heuristics play a role in decision making, there is a limited implementation of BE in marketing practices, even though it could benefit from it (Lee et al., 2009; Goyens, 2018; Welch, 2010).

The literature that exists, proves BE’s effectiveness for marketing. Mulino et al. (2009); Sugden et al. (2019) explain that the effectiveness of time limited offers (when special offers are bound by a time limit) is magnified when it is prominent that the costs of losing them are higher than buying them now (using loss-aversion). Similarly, Ho et al. (2006) explain how firms can use the concept of hyperbolic discounting - people are poor forecasters and prefer instant gratification - can be employed to benefit a firm. They find that by making daily gym plans seem expensive and annual ones cheaper by comparison, people will buy the yearly membership, even though they will not use it enough to justify their payment. Furthermore, a variety of web articles explain the current use of BE in marketing practices, for example using choice architecture in supermarkets (Owrid, 2014), or anchoring in price-setting (Thomas-Comenole, 2020)(see also Kotler, 2016; Jha 2018). However, there is limited academia formalising these ideas.

Furthermore, very little research focuses on the promotional (primarily advertising) aspects of marketing. The studies that do take advertising into account seem constricted. For example, März’s (2019) research on loss-aversion in advertising is done with mathematical models, which is intuitive, but limits how loss-aversion is applied. Another example is research that considers the strategic practices around advertising (Karle and Schumacher, 2017). They discuss the implications of loss-aversion in relation to advertising, but focus more on strategy in a monopolised market, thereby not considering aspects such as competition and advertising context.

# **Methodology**

## **Relevant Studies:**

Adams and Smart (2017) show how BE can be used to promote financial products. It includes explanations of BE concepts in advertising, including loss-aversion and framing. However, they create example advertisements to explain the concepts in context. Furthermore, there is significant focus on the regulatory implications in financial product advertising.

Mulderrig (2016) analyses a UK obesity social marketing campaign. They use a critical discourse analysis (CDA) to evaluate the message of the advertisement. This helped by proving the effectiveness of a qualitative approach to analyse advertising and considering its framing. Notwithstanding the differing goals, their research is influential to this dissertation.

## **Process:**

An important BE concept to introduce is framing, which dictates that the way information is presented can affect the preferences regarding a prospect. It can even change the decisions made about the same prospect (Tversky and Kahneman, 1981). Framing effects vary with context, the (behavioural) type of person (Hsiao-Ching et al., 2008) as well as whether it is gain- or loss-framed (focusing on benefits or costs) (Shiv et al., 1997;  Easwar and Yang, 2015). Framing is relevant here because advertisements meticulously use specific language, visuals, and music to convey their message, and their framing affects the perception of brands (Abdi and Irandoust, 2013). How these advertisements are framed to achieve an effect on product or brand perception is what is analysed.

Three companies were chosen for this analysis:

1. Coca Cola (carbonated drinks)
2. Nike (sportswear)
3. De Beers (jewellery)

Each based on having sustained a majority market share in their industries for over a decade. Each advertisement was then selected based on having a compelling real-life context motivating them (see Appendix A; B).

The generalisability may have been improved by selecting companies and advertisements using a random generator. Furthermore, the prospect of a compelling context itself is subjective and allows for a selection bias, as the chosen advertisements may not be representative samples. However, it is important to note that the aim of this research is not to be generalisable, and instead to provide examples of BE concepts in real advertisements and theorise their effectiveness. However, future research could benefit from a larger and more representative sample.

Using the conclusions of Corvi (2010), four categories were created to analyse the impact of advertising messages:

1. Language (written and spoken)
2. Visuals (photos and videos)
3. Music
4. Overarching message

A discourse analysis (DA) was deemed the best method of analysis because of its broad applicability despite the medium. DA is not just limited to verbal or written conversations and encapsulates any form of discourse (Wodak and Meyer, 2001). Secondly, the literature indicates that language is employed to achieve a specific purpose, which is reflected in the discourse (Bauer, 2010). Finally, as Cook (1989) and Sutherland (2016) conclude, a DA is not just a linguistic analysis but also an evaluation of the way discourse is presented and the context in which it occurs. The combination of these factors allows DA to analyse the framing of advertisements, being effective by in taking all message-relaying aspects of the advertisements into account.

A distinction is required here. CDA places a greater degree of focus on the power struggles, dominance and inequality either proposed by the discourse or the context whereby it occurs (Habibie, 2010). Though both DA and CDA are viable methods of analysis, since this dissertation does not explore the power struggles or inequality between a consumer and a brand, a DA was deemed more suitable.

# **Analysis**

This section considers the 4 factors outlined in Methodology and uses discourse analysis to evaluate the advertisements.

## **1. Coca Cola:**

### **Context:**

The Coca Cola Zero Sugar (CCZS) ad campaign was a rebranding of the original Coke Zero. This was the second rebrand of the drink, after the previous one in 2017 (Beverage Industry, 2017). Subsequently, the appearance of the drink was changed with the claim of a “new and improved recipe” (Million, 2017), and a new campaign was launched to promote the drink.

### **Analysis**

The “Best Coke Ever” advertisement makes use of ambiguity-aversion. Discussed earlier, ambiguity-averse people dislike or stray from prospects where there are ambiguous probabilities, especially when compared to a known probability of gain or loss. Ambiguity-aversion is relatively widespread, with research showing that more than half of experiment subjects exhibit ambiguity-averse behaviour (Bühren et al., 2021). Interestingly, ambiguity-aversion seems to increase when a subject takes another’s opinions or views into account (Keller et al., 2007), showing that people respond more negatively to ambiguity within a social context.

Since the Coke advertisements are not game situations, there are no associated probabilities of winning or losing in play. Instead, they aim to promote, and create a specific perception of CCZS. Hence, the advertisement is purposely framed in an ambiguous way, instead of being gain- or loss-framed, to persuade ambiguity-averse viewers to try their drink.

CCZS is introduced with the appearance of the following phrase in Figure 1.1:

Figure 1.1

Logo, company name

Description automatically generated

Colloquially, this is a statement. The two superlatives, “best” and “ever”, firstly establish the superiority of the subject and secondly, convey a sense of finality. Combined, they portray a declaration. Discursively, however, a statement is declarative when the verb follows the subject (Sutherland, 2016), hence, had it been presented as “This is the best Coke ever”, it would be a discursively correct declarative. While we, as the audience, understand that this is the message, the absence of the verb “is” makes it an incomplete declarative. There is then an immediate change shown in Figure 1.2:

Figure 1.2

Logo, company name

Description automatically generated

This transition from a statement to a question completely contradicts the established ideas of superiority. Discursively, this is most similar to an interrogative statement, but the absence of a verb limits it to being a question (Sutherland, 2016). Considered as a whole, the statement is discursively confusing: the phrase transitions from a stunted declarative to what should be an interrogative, but is a question instead, both lacking a verb. This, however, supports the message: the viewer is introduced to the “Best Coke Ever” which is promptly contradicted by questioning its superiority. Both the message and method of presentation create confusion, which helps the ambiguity created throughout the advertisement.

Figure 1.3

A person with green hair

Description automatically generated with low confidenceA picture containing human face, person, clothing, person

Description automatically generated

A picture containing text, light

Description automatically generatedA couple of women singing into microphones

Description automatically generated with low confidence

The audience’s attention is then captured through the music. It is continuously pacey, and erratic throughout the advertisement, and becomes increasingly apparent with the lack of written discourse on screen. Moreover, the visuals (Figure 1.3) are bright, colourful, and riddled with popular-culture references: there are videos of celebrities, viral digital phenomena and vibrant images, which serve to attract and retain the interest of viewers (Sharpe, 2021; Al-Wugayan, 2022). Used together, these factors create salience for viewers; the variety of visual references are likely to appeal to a wide range of demographics and audiences.

Additionally, spoken discourse prevails with the music and visuals: a narrator says “Yes” and “No” alternatively, which, Figure 1.3 shows, is occasionally mirrored in the visuals. Void of context, “Yes” and “No” are single, concise, and meaningless words. However, in this context, their successive use is contradictory and imposes an argumentative tone on the discourse. In combination, the pacey music, and bright, erratic visuals eradicate any sense of calmness or surety. Instead, they create constant ambiguity about CCZS. As the advertisement progresses, it becomes increasingly erratic: the “Yes(es)” begin to outweigh the “No(s)” while the music and visuals are sped up even further. Despite the confusion, there is the sense of a figurative side being chosen (towards “Yes”), however, it is little more than a suggestion and no side wins, therefore leaving the answer uncertain, further increasing the ambiguity about the superiority of CCZS. The initially confusing statement is supported by the unpredictability of the language, visuals, and music to convey the argumentative tone and establish ambiguity around CCZS. The last section of the advertisement follows.

Figure 1.4

A group of women drinking from bottles

Description automatically generated with medium confidence

Supported by the following narrated discourse:

*“I need to try it first”.*

Under Ellsberg’s (1961) conclusions, an ambiguity-averse viewer would dislike CCZS itself, with the ambiguity created around it, and would rather choose something certain - their preferred carbonated drink. However, the reason it is unlikely this prediction materialises is because of the accompanying discourse. The verbal discourse (potentially) serves as an ambiguity-resolving piece of information; the inclusion of a personal pronoun “I”, followed by the modal verb “need” creates a personal sense of urgency, to want to try it. This is further reinforced by the written discourse in Figure 1.4. It was in Snow’s (2010) expansion of the ambiguity-aversion experiment that they found that information that is introduced to reduce ambiguity, is valued highly enough by subjects that it can help change their initial decisions about prospects. Even though their experiments consider mathematical gain-loss prospects, I propose that this effect would occur with the introduction of the discourse in Figure 1.4. Not only does the written discourse serve as ambiguity-solving information - simply suggesting that the way to solve the ambiguity is to try it - but the verbal discourse serves as a confirmation of what is probably a viewer’s own thought process, possibly establishing some certainty.

Therefore, because of Snow’s (2010) findings, it is likely that the response Ellsberg (1961), predicted - to avoid the prospect entirely - does not materialise in this context. Instead, ambiguity-averse viewers take this information about CCZS (the prospect) and decide to try it. It is likely they do it simply to eradicate the ambiguity, which is consistently created in the advertisement.

## **2. Nike:**

### **Context:**

The bid to become a sponsor for the 2012 London Olympics was won by rival company Adidas (Hermans, 2023) . Legal barriers faced non-sponsors, such as not being able to use certain words or phrases, or even Olympic athletes in advertisements without permission from the Olympic committee (Bruzzone et al., 2013). Nike had seemingly missed out on a rare global marketing opportunity. Their response was the “Find Greatness” advertisements.

### **Analysis:**

One additional BE concept to understand for the Nike advertisements is the endowment effect. Experiments requiring exchange by Knetsch and Sinden (1984) found that people were more likely to want to keep a good once they had been endowed with it. An array of experiments followed, changing the goods as well as the conditions under which they were exchanged. For example, Kahneman et al., (1990) simulated situations where subjects were given opportunities to learn the market value of their endowment, and still found that the recipients overvalued their endowment. Similarly, Harbaugh et al., (2001), found that despite superior market (and life) experiences, there was no significant difference between the endowment effect in children and adults. These findings suggest that the endowment effect is widespread and lasting. Nike uses both, this, and loss-aversion in their advertisement.

Viewers’ attention is initially captured using the 2012 Olympics, with the advertisement displaying various signs of London. However, none of these places are London, UK. They show London Ohio, Jamaica and even a ‘London Hotel’. It is a simple way to overcome Olympic regulations, but effective because viewers are likely to make the connection between London, Jamaica, and the London Olympics. This idea is supported by the narration:

*“There are no grand celebrations here.”*

*“No speeches”*

*“No bright lights”*

A picture containing human face, person, screenshot, person

Description automatically generatedA person riding a bicycle

Description automatically generated with medium confidenceFigure 2.1

A picture containing text, outdoor, sky, cloud

Description automatically generatedA picture containing sky, city, building, outdoor

Description automatically generated

Attributes that are likely to be associated with the Olympics are explicitly contradicted by the statement of there being nothing “grand” or “bright”, but also discursively with the constant use of negatives and “no(s)” (known as negation). When supported with the realistic visuals of Figure 2.1, there is a sense of recognisability created for the viewers. There is the awareness that this advertised world, like their own, is not the “grand” and “bright” Olympics. This is supported by Nike’s use of normal (compared to Olympic athletes) people, in normal contexts, to begin to establish a relationship with the audience. Since the people in the advertisement (and by association the brand itself) are just like the viewer, Nike creates emotions of recognisability and comfort within this advertised world. Importantly, Adams and Smart (2017) show that relationship building is achieved more effectively when creating emotions within consumers. From the beginning of the advertisement, Nike uses the language and visuals to induce relatability with their audience, by presenting the people and contexts as ones to recognise themselves in.

Narrative discourse, with visuals (and music) prevail for the next section of the advertisement:

Figure 2.2

A picture containing nature, landscape, beach, shore

Description automatically generatedA group of people running on a field

Description automatically generated with medium confidence

A group of people standing on a field

Description automatically generated with medium confidenceA group of people swimming in water

Description automatically generated with low confidence

*“We’ve come to believe…”*

*“There are great athletes”*

*“Greatness is for all of us.”*

*“Greatness is not in one special place…”*

*“… and it is not in one special person.”*

The Nike advertisement remains consistently realistic. From the beginning, the (subjectively) hopeful sound of violins score the advertisement at a constant pace. Moreover, the visual themes remain the same; at no point do they change to more extravagant sights or contexts, perhaps like visuals of the Olympics. There is even still negation at this point, with recurring “not(s)” following from the initial “no(s)”. However, the difference here is that the focus is no longer on what is absent, rather on new themes - greatness and togetherness. This section marks a transition: the two themes are established firstly by the visuals in Figure 2.2. Where before (Figure 2.1) we saw visuals of people alone, or empty fields and lone cityscapes, similarly themed images are now filled with groups of people, some playing team sports or even in community activities like surfing. This is supported by the narration: despite the negation, the use of collectives such as “we”, “us”, “are…athletes” establishes a sense of togetherness. This idea of unity is not just limited to the advertised world, but because the viewers are likely to recognise themselves in the advertisement, the use of the collectives, especially “we”, helps strengthen the established brand-viewer relationship (Mulderrig, 2016). Furthermore, there is also a clear change in the messages being portrayed compared to before. The differences between these contexts and the Olympics are ignored, instead the focus switches to the two new themes, and the discourse conveys the message that greatness is not inaccessible or reserved for “a special person”, and rather for “all of us”. The individualistic nature of “a person” is contradicted by the collectives, “all” and “us”, thereby encapsulating the people in the adverts (and by extension the brand) as well as the viewers. At this point a recognisability has been established, and therefore the hope of greatness and unity are likely to be accepted by a viewer because of that relationship.

The narrative discourse that follows serves as the concrete endowment of the established themes:

*“We’ve come to believe that greatness is reserved for the chosen few.”*

*“The truth is greatness is for all of us.”*

Throughout this, and the last section, collectives dominate the discourse, even here, “we”, “all” and “us” are prevalent. Through the visuals and language, ordinariness in unity has been promoted throughout the advertisement. The endowment, however, is established with the last two sentences: there is a sense of transcendence, the previously implied disrupting of presuppositions is clearly communicated with the first line, and then the hope of greatness is explicitly endowed with the second. The second line makes the endowment distinctively apparent, with gain-framing: the use of “for” instead of “in” is purposeful, “for” offers the opportunity to achieve greatness, and therefore serves as a better endowment because it is presented to the viewer as an opportunity to be taken, instead of “in” which would suggest the viewer already possesses it. Moreover, instead of (possibly) framing it as, “We’re as great as the Olympians” or “We’re already great”, Nike chooses specifically to frame greatness as a goal for anyone to achieve, therefore endowing the viewer with the opportunity to achieve it.

A constraint to this idea is that this endowment is not tangible. Most experiments from the reviewed literature find the endowment effect with trading or valuing physical endowments. The endowment suggested here is intangible and may only be realised psychologically. In argument, however, I suggest that the underlying reason for the endowment effect makes this psychological endowment valid. Kahneman et al., (1991) explain that the endowment effect exists because people develop a sense of ownership over what is endowed, subsequently, they feel protective over it and overvalue it and its importance. Therefore, I suggest that the figurative endowment of Nike to its viewers not only qualifies as an endowment, but people will exhibit the same behaviour they would with a physical endowment. Which is seen in the final section.

The last section of the advertisement introduces the main message, with the spoken discourse:

*“Greatness is wherever someone is trying to find it.”*

Accompanied by the only written discourse in the advertisement:

Figure 2.3

A child standing in front of a pool

Description automatically generated with low confidence

The most striking aspect is that the use of collectives ceases here. Firstly, through the spoken discourse: had it kept consistent with the language thus far, it should have said “... wherever [we’re] trying to find it”, yet it says “someone”. Furthermore, the only written discourse in the advertisement, shown in Figure 2.3, uses “your”, a possessive pronoun attributing solely to the individual, directly contrasting with the consistent ideas of togetherness and unity. Even more contradictory is the co-text, “find … greatness”: there is now the insinuation that (the hope of) greatness is no longer for all of us and must now be found. These ideas are further supported by the visuals in Figure 2.3, of a child facing the daunting task of jumping off the diving board. For the first time in the advertisement, we see that an individual is clearly at a distance from the community, as a group of people watch from below. This is where the previously realised endowment becomes important. Through the clear establishment of distance, individuality, and the idea that greatness is lost, Nike contradicts their message thus far, effectively taking away everything that has been endowed. As Kahneman and Tversky (1979; 1992) and Koszegi and Rabin (2006) both conclude, once a reference point is realised, (loss-averse) people associate greater pain to losing from that reference point. I argue that the endowment becomes the reference point, and at this stage, loss-aversion is realised within (loss-averse) viewers, as they experience the (subconscious) pain of losing the endowment.

What follows is the final and lasting image of the advertisement:

Figure 2.4

A picture containing court, sport

Description automatically generated

Promptly after the loss, Figure 2.4 shows the child completing the dive, and distance to his community being eradicated. Without the use of discourse, Nike conveys the message that greatness has been achieved and the losses are no longer prevalent. Though the written discourse and the logo seem unrelated, the latter serves a communicative purpose. If the two were to be connected phrases, a discourse marker - one used to transition between points and facilitate the effectiveness of discourse (Fung and Carter, 2007) - would be used. Here, it may have said “Find your greatness [with] Nike (logo)”, where “with” is a discourse marker. Despite its absence, I would argue that the advertisement silently suggests this. The momentary distance and loss of hope draws a reaction from a loss-averse viewer, but the logo being presented following that sequence is purposeful. Overtly, the message is that the loss was momentary, and greatness has been achieved. Covertly, however, the absence of the discourse marker is not felt, because a viewer is likely to make that connection and may develop ideas that greatness and community can be achieved with Nike.

## **3. De Beers**

### **Context:**

In the 19th century, the discovery of diamond mines in South Africa threatened the price of diamonds as a drastic surplus emerged (Goldschein, 2011). Subsequent decades were a story of supply control, monopolisation, and the eventual cartelisation of the diamond market by De Beers (Bergenstock and Maskulka, 2001). In 1930, it was not common practice to propose with a diamond ring as it is now (Picciotto, 2020) therefore De Beers used that to generate demand for diamonds.

### **Analysis:**

To make diamonds as important (and expensive) as they are today, they used two interrelated concepts, priming and symbolic association. The eventual result of their campaign was that proposing with diamonds not only became desirable but expected. Eventually, as proposing with a diamond became an unwritten rule, De Beers’ products became part of a social norm.

Priming is achieved by purposeful exposure to stimuli, whether those are words, smells, sounds or even objects, which can be used to condition reactions to that stimulus in the future (Cherry, 2019). Though initially limited to physical stimuli by Posner (1978) and Kahneman and Tversky (1982), the research has since widened. Priming is seen to be effective in changing behaviours even with intangible stimuli: Bargh and Chatrand (1999) show how exposure to words of aggravation can cause people to exhibit relatively antisocial behaviours afterwards.

Figure 3.1

A person wearing a red dress

Description automatically generated with medium confidence

Figure 3.2



Figure 3.3



The original De Beers advertisements, Figures 3.1, 3.2 and 3.3, were printed and differ from the TV advertisements of CCZS and Nike. Subsequently, they rely on written discourse and pictures to convey their message. All three advertisements have a picture, accompanied by a short body of text, and a large slogan. Within the written discourse, each of the advertisements explicitly state the word love, boldened, in the subject line. What follows is the body paragraph, which is abundant with poetic language, with words such as “sun, mountains, flowering”. These are ordinary things, but when it is considered that the focal point of conversation is a diamond, these paragraphs seem overly descriptive. Moreover, the themes of love, eternity and diamonds seem unrelated. However, the specific and evocative description used for these themes is likely to capture viewers’ attention and this approach has been shown to be more memorable for readers (Frederiks et al., 2015). Memorability is important for priming. Consistent with Srull and Wyer (1979), Molden (2014) finds that the success of semantic priming (associating two words) is achieved through “excitations” (p.6) in the thought process when exposed to specific stimuli. In these advertisements, the poetic language is interesting and memorable and therefore a reader is likely to have built or be building the association between love and a diamond.

The discourse in the body paragraphs continue to equate the concepts:

*“...and tell of their love in brilliant beauty until the end of time”.*

*“…and while its [love’s]  voice may someday fade … it lingers clarion clear in the diamond’s joyful flames.”*

The advertisements, specifically these extracts, establish one central idea: though love may be eternal it will “fade” eventually, physically speaking; a diamond, however, is eternal. This is most apparent in the use of “until the end of time” which hyperbolically suggests its eternality, with “joyful flames” suggesting an almost youthful invincibility. Similar discourse dominates all three advertisements. Marketing theory defines this as classical conditioning: creating associations by appealing to values or emotions (Ceruto, 2020), Lakoff and Johnson (2003) find that people prefer to rationalise abstract concepts with concrete experiences of symbols, a concept known as symbolic association. BE refers to these findings as priming: the constant prevalence of this idea of love and a diamond’s equal eternality makes a diamond the stimulus, and love the conditioned response. The persistent establishment of these associations helps create a bias in the reader. Even if they have not been fully primed yet, as soon as a semblance of the association is formed, they are eventually likely to believe that the diamond is the perfect symbol for love, and this bias then affects decision-making.

The most prominent aspect of the advertisement is the slogan at the end:

*“A diamond is forever”.*

At first, without context, the slogan is simply a declaration. Discursively, it qualifies as one: the verb “is”, follows the subject of a “diamond”, therefore establishing a tone of certainty. Using a declarative is effective because it is memorable even without context (Sutherland, 2016), furthermore, due to its size and colour, it is probably the first thing a reader notices. On the other hand, the second time they read it, they understand the context from the paragraph. Though already a declarative, the context also makes the slogan implicature, a discursive practice where phrases mean more than what is explicitly stated (Davis, 2014). The implicature is not automatically noticed because it requires established relationships and contexts to understand. Consider two friends driving and one announcing “I’m hungry”. Without the context, and their relationship, the phrase is simply a statement. However, in context, it means they would like to eat with their friend. Hence, in the advertisement’s context, understanding the relationship, a reader could be reading the sentence “[love] is forever”. The substitution of the word love with “a diamond” is effective almost as a final method of priming: if the association has been established in their minds and reading the word “diamond” reminds them of any ideas of love, the priming has been effective. In a situation where they are not primed, the slogan being implicature is likely to begin to help develop those ideas anyway. This is eventually likely to reflect in their decisions, primarily, in terms of buying a diamond (ring) to propose their love.

The wider effect is what has happened over time. As more people are primed and make the symbolic association, the (only) way to propose becomes a diamond ring. For the effects of priming to go from one individual, to becoming a social norm was simply dependent on time: as the association developed from the advertisements to word-of-mouth and through other social means. After a period of time, it is likely that it becomes an expectation rather than just a desire or hope, even if the priming (effect) is no longer prevalent, and it becomes an unwritten rule or social norm (Akerlof, 1980). Ultimately, it continues not because of the initial priming effect, but because, as Festre (2010) finds, a norm is characterised by the threat of seclusion or shame - in this case, rejection for not “correctly” proposing your love.

# **Discussion**

This dissertation evaluates advertising success based on sales and growth figures, like Batra et al. (1995). Furthermore, Chan’s (2001) findings support this approach, stating advertising exists purely to deter consumers from competitors’ products in favour of a brand’s own, and conclude that advertising and sales are inherently related. Organisations release sales/growth figures for public use in annual financial reports. These include product and brand performances and therefore, are easily accessible. Alternative methods include return on advertising spend, which measures the costs against benefits of advertising; or cost of acquisition per customer (Murray, 2022). However, while these may provide better explanations, they are difficult to acquire because they are not publicly available. Hence, this study uses the sales-centric approach, with an added metric, views, to measure the engagement for the advertisements.

The “Best Coke Ever?” advertisement has 1,701,428 views (YouTube, 2021). Additionally, the sales growth of CCZS was around 10% in 2021 and 11% in 2022, and at the end of 2022, Coke reported a total revenue of $43 billion (Coca-Cola, 2022; 2023). The initial growth and positive trend in sales of CCZS indicate that the advertisement and campaign for CCZS was successful.

The “Find Greatness” advertisement received 9,554,724 views (YouTube, 2012), and reported a revenue of $23.3 billion at the end of 2012, a staggering 15% increase from revenues in 2011. At the end of the following year (2013) Nike saw a 5.3% revenue increase (Nike 2011; 2012; 2013). Since the advertisement promoted the whole brand, their positive revenue figures shows that it was effective, especially considering the 15% increase in 2012, showing that they counteracted the potentially damaging effects of losing the Olympics sponsorship bid.

De Beers ran several advertisements like the original ones for a significant period of time. Hence, from 1939 (releasing the original advertisement) to 1979, their revenue increased from $23 million to $2.1 billion (Epstein, 1982; Friedman, 2015; Picciotto, 2020). Since views do not apply here, a similar metric can be used: In 1930, only 10% of brides received diamond rings, whereas by 1990, that figure exceeded 80% (Statista, 2011). The advertisements seem to have been hugely effective, especially when contemporary norms about rings and proposals are considered.

One argument to the effectiveness of advertising is presented by Weilbacher (2003), who states that advertising effect is minimal, if at all, and serves as nothing but additions to the viewer’s existing knowledge from non-advertising sources or even word-of-mouth. This is based on marketing theory: a simple marketing mix includes pricing, product, placement, and promotion (Goi, 2009), where advertising fits into promotion, hence it is only a part of the entire campaign. I refute this point on the basis that advertisements are an explicit communication of the product or service to consumers (Terkan, 2014), and often, the most prominent marketing method. This can perhaps be made more apparent by the meta-analysis study conducted by Eisend and Tarrahi (2016), who found that the messages portrayed in persuasive advertisements have strong cognitive effects on viewers' emotions and therefore perceptions of the brand. Furthermore, Mathur and Knowles (1995) also find that even a change as simple as an advertising slogan can have positive effects on a firm’s market value and revenues, therefore concluding that advertising is indeed effective.

## **Advertisement Similarities:**

Abdi and Irandoust (2013) show that slogans are important in shaping brand perceptions because they are memorable. Each advertisement uses its slogan for this purpose. Coke does it with “Best Coke Ever?”. It is an almost rhetorical, but ultimately subjective slogan, that ensures memorability because the answer to their question is purely based on personal preferences. Whether an individual likes Coke or not, they may be more likely to try CCZS because they remember that slogan’s proposed question. On the other hand, Nike uses the prevalence of the ongoing Olympics to establish the ideas of greatness, and then disrupt the presuppositions around it. Therefore, the eventual slogan of “Find your greatness” is memorable not only because of the hope the advertisement instils, but also because Nike implicitly ties their advertisement to the Olympics itself. Finally, “A diamond is forever” achieves memorability for the same reasons the advertisement does. The priming in the advertisement helps create the associations between a diamond and love, and the overarching message is relayed by the slogan. Since this was the source of the priming itself, it is likely to be more memorable for those that have made the association.

Furthermore, all the advertisements aim to symbolise their product or brand as being the best. Coke’s approach makes this the most apparent: the entire advertisement argues over whether it is the “Best Coke Ever”. Even though they suggest an affirmation towards the end of the advertisement itself, there is no conclusion. Despite this, Coke symbolises their drink as the best throughout the advertisement, suggesting it is the ultimate iteration, and over time these ideas may begin to be associated with CCZS. Similarly, while Nike’s is persistent that greatness is accessible, and while they constantly contradict the sentiments around the Olympics, the innate grandeur of the Olympics is present throughout the advertisement. Combining these two factors help symbolise Nike’s brand as that route to accessible greatness, or perhaps even the idea of Nike being the brand of unreserved greatness itself. Finally, though the goal is the association of love and diamonds, De Beers advertisements present diamonds as indestructible and eternal. Through this idea, and the sentiments created about diamonds in the advertisements, they portray diamonds not just as a symbol of love, but also as the ultimate way of declaring one's love.

The importance of these similarities is that they create salience. BE defines the salience bias as when people depend on information that is incomplete or invalid. They rely on it as it is easy to access because it is memorable (Griffin and Tversky, 1992), which results in irrational decision-making. By achieving memorability, through symbolisation or otherwise, brands create salience in the mind of viewers through their advertisements (Lee et al., 2018; Schenk, 2011). Therefore, potentially affecting the future decisions of viewers, in favour of their own products or services.

## **Advertisement Differences:**

The most important difference is the framing of each advertisement. De Beers’ message is clearly gain-framed, they present the diamond as the ultimate medium to gain the (love of the) subject of your love, with the diamond being the perfect symbol of it. Alternatively, despite the overt hopefulness, Nike’s advertisement is loss-framed: the allusion to the idea that anyone can be great, comes with the implicit message that without Nike, that hope of achieving greatness is lost. Nike insinuates the costs, and potential losses of being without them, thereby loss-framing their message. Interestingly, it is difficult to categorise Coke’s advertisement. Perhaps “Zero Sugar” could be seen as gain-framing but the health aspects are not the focus, instead it is the argument about the superiority of CCZS. There is no focus (even implicitly) on the costs or benefits and therefore cannot be categorised as clearly gain- or loss-framed.

Another substantial difference is in the promotional approaches, which vary due to the respective contexts. Coke presents CCZS as a new product, disregarding the two rebrands, hence having to differentiate it from their own products as well as their competitors’. Therefore, the advertisement is vibrant and flashy; it is fast paced and uses argumentative language. The subjective nature of the question and ambiguity in the advertisement is created purposely to eventually create polarisation and generate a conversation. This could be supported by the inclusion of hashtags (for social media platforms) at the end of the advertisement. Alternatively, since Nike promotes their whole brand, their message is almost consistent throughout their advertisement. The prevalence of the Olympics is used to garner attention and eventually to bind ideas of greatness to themselves as a brand. The slower, confident pace (compared to Coke) of the language, visuals and music supports the consistency of the message. The one lapse is in the momentary sense of loss towards the end of the advertisement, but this does not leave room for any polarisation. It only serves to complete Nike’s overarching message. De Beers differs from both Coke and Nike because there is not a single moment of confusion regarding their message. Each advertisement, and all the discourse, continuously promotes a diamond as the best way of personifying the hedonic qualities of love, forever. The consistency in language is supported by the visuals, each the same: with a woman, some natural element such as flowers and the moon and a diamond in focus. De Beers ensures that their message is clear and consistent to ensure that the priming is effective.

## **Future research:**

Future research should focus on experimentation. It could follow the basis of this dissertation and conclude whether the practical effects of BE concepts in advertising are as effective as theorised. Experimentation that analyses the effect of changing or removing one or more of the four factors would help the validity of this research. Moreover, experiments could understand if the effects of an advertisement that uses BE concepts change with people who vary behaviourally. Experiments could first find the varying degrees of loss-aversion within subjects, and then use (for example) the “Find Greatness” advertisement to evaluate the effects. Perhaps those with stronger loss-aversion may react differently to someone who is less loss-averse. Finally further studies should be done on a wider range of advertisements. Firstly, to see whether there is already an implementation of BE concepts, but more importantly to understand whether advertisements could benefit from employing BE concepts in their practices.

# **Limitations**

The primary limitation is that attributing the success of any of these brands to advertising is reductive. Other factors such as tastes, preferences, brand loyalty or even availability of the products advertised are not considered in the analysis. Furthermore, though the literature helps assess effectiveness through sales, assuming there is a direct causation between the two is difficult. People may buy the product without ever seeing the advertisement or they may already be brand loyal and buy the brand’s products. Alternatively, some people may prefer other brands and the advertisements may not change their perceptions. Hence, while a correlation may be inferred, attributing eventual success just to advertisements is a simplification.

Secondly, the BE concepts are used here in a slightly unorthodox and visceral sense. Unlike the many BE studies that employ game-like experiments, advertising is unlikely to have physical transactions, or tangible effects. Therefore, the findings of this dissertation are (currently) limited to a theoretical nature, which may not translate in experimental or real-life conditions. This is significant especially in the case of the Nike and Coke advertisements; the effects of both, loss- and ambiguity-aversion, are usually discussed in mathematical or monetary terms, whereas this dissertation does so in qualitative and psychological terms.

Finally, both the subject (advertisements) and method of analysis (DA) are prone to interpretive bias. Van Dijk (1993) states that the validity of a (C)DA is strengthened by the clarity of the researcher’s goals and motivations (see Introduction and Methodology). Notwithstanding this, the study is dependent on my perceptions of the advertisements in light of my objectives, and the qualitative nature of a DA study only adds to the possibility of an interpretive bias. Therefore, it follows that the findings of this research have poor generalisability. Furthermore, the effects of the advertisements defined in the conclusions may not be as pronounced (if at all) as the study suggests.

# **Conclusion**

The qualitative nature of the analysis allows this dissertation to apply the concepts of loss-aversion, ambiguity-aversion, and social norms past gain-loss, mathematical prospects. Using a discourse analysis, the four message-relaying aspects of advertisements - language, music, visuals, and the main message - were analysed in light of their real-world context. Subsequently, their effects on viewers were explained using findings from the field of BE and their success was evaluated using the sales/growth figures of the brands and products advertised.

The study finds evidence that BE is not only present in advertisements, but also finds that, if advertised to the right (behavioural) type of people, these can be effective for promotion. However, further research and experimentation is required, firstly to test the conclusions of the theoretical findings here; secondly, to understand whether BE can be applicable to advertisements on a wider scale, and how its effects may be better derived.

Overall, this study is successful in using a qualitative method to apply and analyse the use of BE concepts. It adds to the limited qualitative BE literature that uses these concepts and to the limited literature that analyses Behavioural Economics and advertising as (potentially) interrelated practices.

# **References**

1. Abdi, S. and Irandoust, A. 2013. THE IMPORTANCE OF ADVERTISING SLOGANS AND THEIR PROPER DESIGNING IN BRAND EQUITY. *International Journal of Organizational Leadership*. 2(2), pp.62–69.
2. Adams, P. and Smart, L. 2017. *Encouraging debate among academics, practitioners and policymakers in all aspects of financial regulation. Financial Conduct Authority www.fca.org.uk From advert to action: behavioural insights into the advertising of financial products* [Online]. [Accessed 6 March 2023]. Available from: https://www.fca.org.uk/publication/occasional-papers/op17-26.pdf.
3. Akerlof, G.A. 1980. A Theory of Social Custom, of Which Unemployment May be One Consequence. *The Quarterly Journal of Economics*. 94(4), p.749.
4. Al-Najjar, N.I. and Weinstein, J. 2009. THE AMBIGUITY AVERSION LITERATURE: A CRITICAL ASSESSMENT. *Economics and Philosophy*. 25(3), pp.249–284.
5. Al-Wugayan, A.A. 2022. Celebrity appeal effectiveness in donating to the cause: Popular Culture vs. Religious Celebrities. *International Review on Public and Nonprofit Marketing*.
6. Arnsperger, C., Varoufakis, Y., Alcorn, S., Solarz, B. and Levitt, K. 2006. *-The Autistic Economist -Reclaiming Policy Space For Equitable Economic Development Opinion -What Exactly Is ‘Development’?* [Online]. Available from: http://www.paecon.net/PAEReview/wholeissues/issue38.pdf.
7. Bargh, J.A. and Chartrand, T.L. 1999. The Unbearable Automaticity of Being. *American Psychologist*. 54(7), pp.462–479.
8. Batra, R., Lehmann, D.R., Burke, J. and Pae, J. 1995. When does advertising have an impact? A study of tracking data. *Journal of Advertising Research*. 35(5), pp.19–33.
9. Bauer, M.W. 2010. *Qualitative researching with text, image and sound : a practical handbook*. Los Angeles Sage Publ.
10. Bergenstock, D.J. and Maskulka, J.M. 2001. The de beers story: are diamonds forever? *Business Horizons*. 44(3), pp.37–44.
11. Beverage Industry 2017. Coca-Cola Zero rebrands to Coca-Cola Zero Sugar | 2017-07-27 | Beverage Industry. *www.bevindustry.com*. [Online]. [Accessed 12 March 2023]. Available from: https://www.bevindustry.com/articles/90409-coca-cola-zero-rebrands-to-coca-cola-zero-sugar.
12. Bourdieu, P. 1984. *Distinction : a social critique of the judgement of taste* [Online]. Cambridge: Harvard University Press. [Accessed 9 December 2022]. Available from: https://monoskop.org/images/e/e0/Pierre\_Bourdieu\_Distinction\_A\_Social\_Critique\_of\_the\_Judgement\_of\_Taste\_1984.pdf.
13. Bruzzone, R., Ciobanu, V., Chummun, M. and Fabbroni, F. 2013. Case study: Branding strategies deployed at the 2012 Games in London. *Business Today*. [Online]. Available from: https://www.businesstoday.in/magazine/lbs-case-study/story/branding-strategies-at-london-olympics-2012-130660-2013-09-14.
14. Bühren, C., Meier, F. and Pleßner, M. 2021. Ambiguity aversion: bibliometric analysis and literature review of the last 60 years. *Management Review Quarterly*.
15. Cerreia , S., Maccheroni, F., Marinacci, M. and Montrucchio, L. 2008. *Uncertainty averse prefernces* [Online]. [Accessed 6 January 2023]. Available from: https://igier.unibocconi.eu/sites/default/files/media/attach/Eichinger-Golin.pdf.
16. Ceruto, D.S. 2020. Council Post: The Psychological Concept That Can Make You A More Effective Marketer. *Forbes*. [Online]. [Accessed 18 April 2023]. Available from: https://www.forbes.com/sites/forbescoachescouncil/2020/02/19/the-psychological-concept-that-can-make-you-a-more-effective-marketer/?sh=61ba152321a4.
17. Chan, Y. 2001. Doesn’t Everyone Know That Purpose Of Advertising Is To Promote Products? *BMJ: British Medical Journal*. 322(7277), pp.52–52.
18. Cherry, K. 2019. How Priming Affects the Psychology of Memory. *Verywell Mind*. [Online]. [Accessed 3 February 2023]. Available from: https://www.verywellmind.com/priming-and-the-psychology-of-memory-4173092.
19. Coca-Cola 2022. Coca-Cola Reports Fourth Quarter and Full-Year 2021 Results. *The Coca-Cola Company*. [Online]. [Accessed 19 January 2023]. Available from: https://investors.coca-colacompany.com/news-events/press-releases/detail/1046/coca-cola-reports-fourth-quarter-and-full-year-2021-results#:~:text=For%20the%20full%20year%2C%20net.
20. Coca-Cola 2023. Coca-Cola Reports Fourth Quarter and Full-Year 2022 Results | Press Release. *The Coca-Cola Company*. [Online]. [Accessed 16 February 2023]. Available from: <https://www.coca-colacompany.com/press-releases/fourth-quarter-full-year-2022-results>.
21. Conway, J. 2018. U.S. Coca-Cola market share 2018 | Statista. Statista. [Online]. [Accessed 7 January 2023]. Available from: https://www.statista.com/statistics/225388/us-market-share-of-the-coca-cola-company-since-2004/.
22. Cook, G. 1989. *Discourse* [Online]. Oxford: Oxford University Press. [Accessed 1 December 2022]. Available from: https://www.scribd.com/document/463102470/cook-guy-Discourse-pdf#.
23. Corvi, E. 2010. The effectiveness of advertising: a literature review. *In*: *10th Global Conference on Business & Economics* [Online]. Rome, Italy. [Accessed 9 November 2022]. Available from: https://www.researchgate.net/profile/Michelle-Bonera/publication/232743560\_The\_effectiveness\_of\_advertising\_a\_literature\_review/links/5506ea510cf26ff55f7b3074/The-effectiveness-of-advertising-a-literature-review.pdf.
24. Dato, S., Grunewald, A. and Müller, D. 2017. Expectation-based loss aversion and rank-order tournaments. *Economic Theory*. 66(4), pp.901–928.
25. Davis, W. 2014. Implicature (Stanford Encyclopedia of Philosophy). *Stanford.edu*. [Online]. Available from: <https://plato.stanford.edu/entries/implicature/>.
26. Drum, T. 2016. 1948: De Beers ‘A diamond is forever’ campaign invents the modern day engagement ring. The Drum. [Online]. [Accessed 8 December 2022]. Available from: https://www.thedrum.com/news/2016/03/31/1948-de-beers-diamond-forever-campaign-invents-the-modern-day-engagement-ring.
27. Easwar, K. and Yang, L. 2015. Tastes great or tasty? Matching advertising language to product construal. *Developments in Marketing Science: Proceedings of the Academy of Marketing Science*., pp.428–428.
28. Eisend, M. and Tarrahi, F. 2016. The Effectiveness of Advertising: A Meta-Meta-Analysis of Advertising Inputs and Outcomes. *Journal of Advertising*. 45(4), pp.519–531.
29. Ellsberg, D. 1961. Risk, Ambiguity, and the Savage Axioms. *The Quarterly Journal of Economics*. 75(4), pp.643–669.
30. Elster, J. 1989. Social Norms and Economic Theory. *Journal of Economic Perspectives*. 3(4), pp.99–117.
31. Epstein, E.J. 1982. Have You Ever Tried to Sell a Diamond? *The Atlantic*. [Online]. [Accessed 17 February 2023]. Available from: https://www.theatlantic.com/magazine/archive/1982/02/have-you-ever-tried-to-sell-a-diamond/304575/.
32. Festré, A. 2009. INCENTIVES AND SOCIAL NORMS: A MOTIVATION-BASED ECONOMIC ANALYSIS OF SOCIAL NORMS. *Journal of Economic Surveys*. 24(3), pp.511–538.
33. Foo, D. 2019. My favourite ad of all time: DeBeers ‘A diamond is forever’ from 1938 onwards. Mumbrella Asia. [Online]. [Accessed 9 December 2022]. Available from: https://www.mumbrella.asia/2019/04/my-favourite-ad-of-all-time-debeers-diamonds-are-forever-from-1938-onwards.
34. Fox, C.R. and Tversky, A. 1995. Ambiguity Aversion and Comparative Ignorance. *The Quarterly Journal of Economics*. 110(3), pp.585–603.
35. Frederiks, E.R., Stenner, K. and Hobman, E.V. 2015. Household energy use: Applying behavioural economics to understand consumer decision-making and behaviour. *Renewable and Sustainable Energy Reviews*. 41, pp.1385–1394.
36. Friedman, U. 2015. How an Ad Campaign Invented the Diamond Engagement Ring. *The Atlantic*. [Online]. [Accessed 17 January 2023]. Available from: https://www.theatlantic.com/international/archive/2015/02/how-an-ad-campaign-invented-the-diamond-engagement-ring/385376/.
37. Fung, L. and Carter, R. 2007. Discourse Markers and Spoken English: Native and Learner Use in Pedagogic Settings. *Applied Linguistics*. 28(3), pp.410–439.
38. Gächter, S. and Fehr, E. 1999. Collective action as a social exchange. *Journal of Economic Behavior & Organization*. 39(4), pp.341–369.
39. Goi, C.L. 2009. A Review of Marketing Mix: 4Ps or More? *International Journal of Marketing Studies*. 1(1).
40. Goldschein, E. 2011. The Incredible Story Of How De Beers Created And Lost The Most Powerful Monopoly Ever. *Business Insider*. [Online]. [Accessed 12 February 2023]. Available from: https://www.businessinsider.com/history-of-de-beers-2011-12#when-faced-with-a-threat-to-their-diamond-monopoly-like-one-from-the-soviet-union-de-beers-simply-bought-up-their-inventory-to-maintain-complete-control-7.
41. Goyens, M. 2018. Using Behavioural Economics For Rather than Against Consumers – A Practitioner’s Perspective. *Intereconomics*. 2018(1), pp.12–17.
42. Griffin, D. and Tversky, A. 1992. The weighing of evidence and the determinants of confidence. *Cognitive Psychology*. 24(3), pp.411–435.
43. Habibie , A. 2010. *COMPARISON BETWEEN DISCOURSE ANALYSIS AND CRITICAL DISCOURSE ANALYSIS FROM LINGUISTICS VIEW oleh Alvons Habibie* [Online]. [Accessed 2 February 2023]. Available from: https://media.neliti.com/media/publications/288876-comparison-between-discourse-analysis-an-6e43bd01.pdf.
44. Halevy, Y. 2007. Ellsberg Revisited: An Experimental Study. *Econometrica*. 75(2), pp.503–536.
45. Harbaugh, W.T., Krause, K. and Vesterlund, L. 2001. Are adults better behaved than children? Age, experience, and the endowment effect. *Economics Letters*. 70(2), pp.175–181.
46. Hermans, K. 2023. 7 Best Nike Ads and Marketing Campaigns That Get Our Approval. *filestage.io*. [Online]. [Accessed 8 February 2023]. Available from: https://filestage.io/blog/best-nike-marketing-campaigns/.
47. Herweg, F. 2013. The expectation-based loss-averse newsvendor. *Economics Letters*. 120(3), pp.429–432.
48. Ho, T.H., Lim, N. and Camerer, C.F. 2006. Modeling the Psychology of Consumer and Firm Behavior with Behavioral Economics. *Journal of Marketing Research*. 43(3), pp.307–331.
49. Hsiao-Ching, L., Shu-Fang, L. and Ya-Chung, C. 2008. The Influence of Product Type on Message Framing Effect. *Journal of Product Research*. 26(3), pp.143–149.
50. Jha, V. 2018. Brand Management and Behavioral economics. *www.linkedin.com*. [Online]. [Accessed 13 April 2023]. Available from: https://www.linkedin.com/pulse/brand-management-behavioral-economics-vrajesh-jha/.
51. Kahneman, D., Knetsch, J.L. and Thaler, R.H. 1991. Anomalies: The Endowment Effect, Loss Aversion, and Status Quo Bias. *Journal of Economic Perspectives*. 5(1), pp.193–206.
52. Kahneman, D., Knetsch, J.L. and Thaler, R.H. 1990. Experimental Tests of the Endowment Effect and the Coase Theorem. *Journal of Political Economy*. 98(6), pp.1325–1348.
53. Kahneman, D. and Tversky, A. 1979. Prospect Theory: an Analysis of Decision under Risk. *Econometrica*. 47(2), pp.263–292.
54. Kahneman, D. and Tversky, A. 1982. Variants of uncertainty. *Cognition*. 11(2), pp.143–157.
55. Kaplan, D.B. 2019. Forever Diamonds - A History of Diamond Marketing. www.gemnation.com. [Online]. [Accessed 8 December 2022]. Available from: https://www.gemnation.com/base?processor=getPage&pageName=forever\_diamonds\_2.
56. Karle, H. and Peitz, M. 2014. Competition under consumer loss aversion. *The RAND Journal of Economics*. 45(1), pp.1–31.
57. Karle, H. and Schumacher, H. 2017. Advertising and attachment: exploiting loss aversion through prepurchase information. *The RAND Journal of Economics*. 48(4), pp.927–948.
58. Keller, L.R., Sarin, R.K. and Sounderpandian, J. 2007. An examination of ambiguity aversion: Are two heads better than one? *Judgment and Decision Making*. 2(6), pp.390–397.
59. Khaveen Investments 2022. Nike Stock: Solid Foothold Over Market (NYSE:NKE) | Seeking Alpha. seekingalpha.com. [Online]. [Accessed 8 January 2023]. Available from: https://seekingalpha.com/article/4500051-nike-solid-foothold-over-market.
60. Knetsch, J.L. and Sinden, J.A. 1984. Willingness to Pay and Compensation Demanded: Experimental Evidence of an Unexpected Disparity in Measures of Value. *The Quarterly Journal of Economics*. 99(3), p.507.
61. Kőszegi, B. and Rabin, M. 2006. A Model of Reference-Dependent Preferences. *The Quarterly Journal of Economics*. 121(4), pp.1133–1165.
62. Kotler, P. 2016. Why Behavioral Economics Is Really Marketing Science. *Evonomics*. [Online]. [Accessed 6 December 2022]. Available from: https://evonomics.com/behavioraleconomics-neglect-marketing/.
63. Lee, H.C.B., Ba, S., Li, X. and Stallaert, J. 2018. Salience Bias in Crowdsourcing Contests. *Information Systems Research*. 29(2), pp.401–418.
64. Lee, L., Amir, O. and Ariely, D. 2009. In Search of Homo Economicus: Cognitive Noise and the Role of Emotion in Preference Consistency. *Journal of Consumer Research*. 36(2), pp.173–187.
65. März, O. 2019. Competitive persuasive advertising under consumer loss aversion. *Economics Letters*. 185, p.108690.
66. Mathur, I. and Knowles, L.L. 1995. The effect of advertising slogan changes on the market values of firms. *Journal of Advertising Research*. 35(1), pp.59–65.
67. Mill, J.S. 2009. *Principles of political economy : with some of their applications to social philosophy* [Online]. Bibliolife. [Accessed 15 December 2022]. Available from: https://books.google.com.qa/books?hl=en&lr=&id=D808AAAAYAAJ&oi=fnd&pg=PR3&dq=JS+Mill+principles+&ots=IQgwdODGhL&sig=8GCf77SqP8ssCi\_Mvjgh4zab2iY&redir\_esc=y#v=onepage&q=ISBN&f=false.
68. Million, M. 2017. A Closer Look at the Rebranding of Coca-Cola Zero. *www.fullsurge.com*. [Online]. Available from: https://www.fullsurge.com/blog/a-closer-look-at-the-rebranding-of-coca-cola-zero.
69. Molden, D.C. 2014. Understanding Priming Effects in Social Psychology: What is ‘Social Priming’ and How does it Occur?. *Social Cognition*. 32(Supplement), pp.1–11.
70. Mulderrig, J. 2016. Reframing obesity: a critical discourse analysis of the UK’s first social marketing campaign. *Critical Policy Studies*. 11(4), pp.455–476.
71. Mulino, D., Scheelings, R., Brooks, R. and Faff, R. 2009. Does Risk Aversion Vary with Decision‐Frame? An Empirical Test Using Recent Game Show Data. *Review of Behavioural Finance*. 1(1/2), pp.44–61.
72. Murray, E. 2022. Ways to Measure the Success of a Campaign. *DemandScience*. [Online]. [Accessed 5 January 2023]. Available from: https://demandscience.com/resources/blog/ways-to-measure-campaign-success/.
73. Nike 2011. NIKE, Inc. Reports Fiscal 2011 Fourth Quarter and Full Year Results. *investors.nike.com*. [Online]. [Accessed 7 December 2022]. Available from: https://investors.nike.com/investors/news-events-and-reports/investor-news/investor-news-details/2011/NIKE-Inc-Reports-Fiscal-2011-Fourth-Quarter-and-Full-Year-Results/default.aspx.
74. Nike 2012. NIKE, Inc. Reports Fiscal 2012 Fourth Quarter and Full Year Results. *investors.nike.com*. [Online]. [Accessed 18 February 2023]. Available from: https://investors.nike.com/investors/news-events-and-reports/investor-news/investor-news-details/2012/NIKE-Inc-Reports-Fiscal-2012-Fourth-Quarter-and-Full-Year-Results1130041/default.aspx.
75. Nike 2013. NIKE, Inc. Reports Fiscal 2013 Fourth Quarter and Full Year Results. *investors.nike.com*. [Online]. [Accessed 16 February 2023]. Available from: https://investors.nike.com/investors/news-events-and-reports/investor-news/investor-news-details/2013/NIKE-Inc-Reports-Fiscal-2013-Fourth-Quarter-and-Full-Year-Results/default.aspx.
76. Owrid, J. 2014. Behavioral Economics Gives The Advertising Industry A Nudge In The Right Direction. *Forbes*. [Online]. [Accessed 18 February 2023]. Available from: https://www.forbes.com/sites/johnowrid/2014/02/05/behavioural-economics-gives-the-advertising-industry-a-nudge-in-the-right-direction/?sh=9108d8b6ab87.
77. Picciotto, E. 2020. De Beers’ most famous ad campaign marked the entire diamond industry | Theeyeofjewelry.com. *https://theeyeofjewelry.com/*. [Online]. [Accessed 18 January 2023]. Available from: https://theeyeofjewelry.com/de-beers/de-beers-jewelry/de-beers-most-famous-ad-campaign-marked-the-entire-diamond-industry/.
78. Posner, M.I. 1978. *Chronometric explorations of mind*. Hillside: Erlbaum ; New York ; London.
79. Rege, M. and Telle, K. 2001. An Experimental Investigation of Social Norms. *www.econstor.eu*. [Online]. [Accessed 10 May 2023]. Available from: https://www.econstor.eu/handle/10419/192292.
80. Rimal, R.N. and Storey, J.D. 2020. Construction of Meaning during a Pandemic: The Forgotten Role of Social Norms. *Health Communication*. 35(14), pp.1732–1734.
81. Sarin, R.K. and Weber, M. 1993. Effects of Ambiguity in Market Experiments. *Management Science*. 39(5), pp.602–615.
82. Schelling, T.C. 1978. *Micromotives and macrobehaviour : with a new preface and the Nobel lecture* [Online]. New York: W.W Norton & Co. [Accessed 7 December 2022]. Available from: https://gpde.direito.ufmg.br/wp-content/uploads/2019/04/ACFrOgA-pnFwzuMC2ZLY9ug4fS9h9LcNjdMRvz2N5bpMQ1WD7sYyo6ZviBQj2yEkv0yOGqk9xpIbMyzCqALfx1TOJ-YaTGzdGUS45gD\_85-Ut2lYtWYauqLAP8sSm5s.pdf.
83. Schenk, Deborah.H. 2011. Exploiting the Salience Bias in Designing Taxes. *Yale Journal on Regulation*. 28(1), pp.253–313.
84. Schmeidler, D. 1989. Subjective Probability and Expected Utility without Additivity. *Econometrica*. 57(3), p.571.
85. Schmidt, U. and Zank, H. 2005. What is Loss Aversion? *Journal of Risk and Uncertainty*. 30(2), pp.157–167.
86. Sethi, R. 1996. Evolutionary stability and social norms. *Journal of Economic Behavior & Organization*. 29(1), pp.113–140.
87. Sharpe, N. 2021. How Brands Boost Their Relevance With Pop Culture. *Spiralytics Inc*. [Online]. [Accessed 12 March 2023]. Available from: https://www.spiralytics.com/blog/boost-relevance-with-pop-culture/.
88. Shiv, B., Edell, J.A. and Payne, J.W. 1997. Factors Affecting the Impact of Negatively and Positively Framed Ad Messages. *Journal of Consumer Research*. 24(3), pp.285–294.
89. Snow, A. 2010. Ambiguity and the value of information. *Journal of Risk and Uncertainty*. 40(2), pp.133–145.
90. Srull, T.K. and Wyer, R.S. 1979. The role of category accessibility in the interpretation of information about persons: Some determinants and implications. *Journal of Personality and Social Psychology*. 37(10), pp.1660–1672.
91. Statista 2011a. Share of brides in the U.S. who received a diamond engagement ring-1990. Statista. [Online]. [Accessed 14 February 2023]. Available from: https://www.statista.com/statistics/238115/share-of-brides-in-the-us-with-a-diamond-engagement-ring/.
92. Sugden, R. 1989. Spontaneous Order. *Journal of Economic Perspectives*. 3(4), pp.85–97.
93. Sugden, R., Wang, M. and Zizzo, D.J. 2019. Take it or leave it: Experimental evidence on the effect of time-limited offers on consumer behaviour. *Journal of Economic Behavior & Organization*. 168, pp.1–23.
94. Sutherland, S. 2016. *A beginner’s guide to discourse analysis* [Online]. London ; New York, Ny: Palgrave Macmillan. [Accessed 13 April 2023]. Available from: https://docplayer.net/191506073-A-beginner-s-guide-to-discourse-analysis.html.
95. Terkan, R. 2014. Importance of Creative Advertising and Marketing According to University Students’ Perspective. *International Review of Management and Marketing*. 4(3), pp.239–246.
96. Thomas-Comenole, S. 2020. Behavioral Economics in Marketing: Introduction to Behavioral Economics. *www.linkedin.com*. [Online]. [Accessed 7 December 2022]. Available from: https://www.linkedin.com/pulse/behavioral-economics-marketing-introduction-sandra-thomas-comenole/.
97. Tversky, A. and Kahneman, D. 1992. Advances in Prospect Theory: Cumulative Representation of Uncertainty. *Journal of Risk and Uncertainty*. 5(4), pp.297–323.
98. Tversky, A. and Kahneman, D. 1981. The Framing of Decisions and the Psychology of Choice. *Science*. 211(4481), pp.453–458.
99. Van Dijk, T.A. 1993. Principles of Critical Discourse Analysis. *Discourse & Society*. 4(2), pp.249–283.
100. Weilbacher, W.M. 2003. How Advertising Affects Consumers. *Journal of Advertising Research*. 43(2), pp.230–234.
101. Welch, N. 2010. A marketer’s guide to behavioral economics | McKinsey. *www.mckinsey.com*. [Online]. Available from: https://www.mckinsey.com/capabilities/growth-marketing-and-sales/our-insights/a-marketers-guide-to-behavioral-economics.
102. Wodak, R. and Meyer, M. 2001. *Methods of critical discourse analysis*. London: SAGE Publications Ltd.
103. Young, H. 1998. *Individual Strategy and Social Structure: An Evolutionary Theory of Institutions.* Princeton: Princeton University Press.
104. YouTube 2021. New Coke Zero Sugar! Best Coke Ever? *www.youtube.com*. [Online]. [Accessed 5 November 2022]. Available from: https://www.youtube.com/watch?v=PuBsGo9CObA.
105. YouTube 2012. Nike: Find Your Greatness. *YouTube*. [Online]. [Accessed 5 December 2022]. Available from: <https://www.youtube.com/watch?v=WYP9AGtLvRg>.
106. Zhang, J. 2022. More ambiguity aversion or more risk aversion? *Economic Theory Bulletin*. 10.
107. Zimnisky, P. 2018. De Beers’ market share of the global rough diamond insustry. TheDiamondLoupe. [Online]. [Accessed 8 January 2023]. Available from: https://www.thediamondloupe.com/sites/awdcnewswall/files/attachments/De%20Beers%20Market%20Share%20History.pdf.

# **Appendices**

## **Appendix A:**

Market Share for chosen companies:

Market share of Coca-Cola against competitors, 2004 - 2021

A picture containing text, screenshot, line, font

Description automatically generated

Source: Conway (2018)

Market share of Nike against competitors, 2012-2021

A picture containing text, screenshot, purple, colorfulness

Description automatically generated

Source: Khaveen Investments (2022)

Market share of De Beers, 1989 - 2018

A picture containing text, screenshot, line, font

Description automatically generated

Source: Zimnisky (2018)

## **Appendix B:**

Sources and Timestamps of advertisements used:

1. Coca-Cola Advertisement (YouTube, 2021): 0:00 – 0:30
2. Nike Advertisement (YouTube, 2012): 5:30 – 6:31
3. De Beers advertisements: Drum (2016), Foo (2019) and Kaplan (2019)