Consumers' Response to Product Copycats and the Role of Brand Loyalty

An applied research to the Apple Inc. - Samsung Electronics case

We Fong Ma

ERNA 375268

3/17/2014

Supervisor: Dr. F. Adiguzel

ERASMUS UNIVERSITEIT ROTTERDAM

ERASMUS SCHOOL OF ECONOMICS

CONTENTS

Abstract

Apple Inc. sued Samsung Electronics in April 2011, claiming that Samsung copied Apple products, which was alleged to have resulted in a loss of $500 million in lost profits for Apple Inc. This was the start of a series of ongoing law suits, which continued to the present day. However, Apple Inc. and Samsung Electronics are considered to have the most loyal customer base in the product category of Smartphones. Do loyal customers fall victim to copycats as easily as non-loyal customers? How does consumer brand loyalty towards either the leader brand or the copycat affect the consumer response to the copycat? The purpose of this thesis is to examine the role of brand loyalty on the consumer response to copycat behavior.

An experiment in the form of questionnaires was conducted among a sample of over 500 unique individuals. The results indicate that brand loyalty does not influence the perception of similarity between the leader brand and the copycat. Neither does brand loyalty protect the leader brand from copycats. On the contrary, loyal customers are more vulnerable to copycats, than customers that are not loyal. However, copycats from major brands will simultaneously improve the general image of the leader brand. On the other hand, customers loyal to the copycat respond negatively when their brand of preference displays imitative behavior. The bipolar characteristic of brand loyalty's effect on the response to copycats holds that brand loyalty is positive in some scenarios, but negative in others, for either the copycat or the brand that is being copied. The implication of these findings suggest that leader brands should not always perceive copycats as a negative issue, as it can improve the overall evaluation of the leader brand in the right circumstances.

CHAPTER 1: INTRODUCTION

"Imitation is the sincerest form of flattery."
- Charles Caleb Colton

1.1 Problem Orientation

Suppose that two people named John and Brian are planning to purchase a new Smartphone and are therefore browsing through the inventory of a mobile phone retailer. Both John and Brian currently own a previous generation Apple iPhone. John has been a fan of Apple branded products for years, resulting in most of his electronics being Apple branded. Brian on the other hand has no particular attachment to the brand and received his iPhone as a gift. Both John and Brian notice a Smartphone of a different brand, but very similar in design to the latest Smartphone introduced by Apple in terms of appearance and features. Do John and Brian respond differently to the seemingly "copycat" brand?

Copycat brands imitate the name, logo, package design or even products of a leader brand. This is not a rare phenomenon, but a widespread occurrence in the current market (Scott-Morton & Zettelmeyer, 2004). The imitation of products can vary across different cases. Some copycat brands are very transparent in their actions, while others are more subtle when it comes to imitating the competition. However, copycats generally share a common goal, which is to attempt to free-ride on positive brand-associations build by the copied brand, often a brand leader, such as product quality (Warlop & Alba, 2004). As imitations are often priced below the leader brands, leader brands are at risk of suffering loss of sales or having their brand equity damaged (Zaichkowsky & Simpson, 1996). Understanding consumers' thought process when dealing with imitation would point us in the right direction to comprehend how brand imitation functions and which factors are of influence.

Previous studies have covered various dimensions in the field of copycat behavior and have explored the factors that influence consumer evaluation of copycats (d'Astous & Gargouri, 2001). However, to the best of my knowledge, no research has been conducted on how loyalty affects the assessment of a competitor when copycat behavior is present. It has been shown that brand loyalty creates greater resistance to persuasion tactics from competitors, e.g. advertising (Dick & Basu, 1994).

This holds that the assessment of copycat brands may not only be affected by the extent of similarity between products of the copycat and leader brand, but also on the state of mind of the person who assesses it, i.e. how brand loyal the person is and to which brand the loyalty is directed towards. This thesis will shed more light on this question by applying it to the mobile phone industry, specifically, the Apple-Samsung case. The series of ongoing lawsuits started in April 2011 when Apple Inc. sued Samsung Electronics, claiming that Samsung copied Apple products (Iwatani & Sherr, 2011; Chen, 2011). In the US trial in 2012, Apple claimed that they suffered $500 million in lost profits, due to Samsung's actions. They stated that "*Apple [lost] customers and revenue as a result of Samsung's infringement*" (Macari, 2012). However, is Apple's concern regarding losing customers well grounded? Do consumers mindlessly choose products that look similar? These comments and news regarding the Apple-Samsung court cases are the main inspiration of this thesis topic.

1.2 Background

This section will briefly explain the background of this research, in order to have a better understanding of the current circumstances regarding the smartphone market and the legal case between Apple and Samsung.

1.2.1 The Mobile Phone Market.

The first commercial mobile phone was the DynaTAC, developed by Motorola in 1973. However, priced at 3,995.00 US dollars, over 9,000.00 US dollars in today's currency accounting for inflation, it would still take another decade before mobile phones become common (Mack, 2013). The adoption of mobile phones started when the price began to decrease and technology started to improve. The United States was the market leader in the 80s and followed by Europe in the 90s in terms of mobile phone usage. Since the 2000s, the importance of markets has shifted more towards Asian countries, e.g. China, India and South-Korea, who developed rapidly in a short amount of time (Kalba, 2008).

Smartphone adoption has occurred at a remarkable rate in the past six years, surpassing the adoption of any consumer technology in history (Farago, 2012). By measuring the adoption of iOS and Android devices, Flurry, a leading mobile measurement and advertising platform, concluded that smartphone adoption is ten times faster than the PC revolution in the 80s, two times faster than the 90s internet boom and 3 times faster than the recent social network adoption (Farago, 2012). While other smartphone operating systems exist in the current market,

iOS and Android cover almost 95% of the market in the second quarter of 2013, holding that measuring these two operating systems will provide a reliable representation of the market (Gartner, 2013). According to an annual survey held by the Pew Research Center, over 56% of US adults own a smartphone and is steadily growing (Smith, 2013).

Cellular devices have changed drastically since its introduction both on the inside, e.g. faster computing power, and on the outside in terms of aesthetics. Many different designs followed the original bulky design of the DynaTAC, such as the slide design or the flip design (Exhibit 1). Touchscreen-based cell phones did exist before the modern adoption of smartphones, but were mainly limited to PDAs only. The variation in mobile phoned designs decreased dramatically at the end of the first decade of the 2000s. This is shown well by *NTT docomo*, a Japanese communication company, who in 2012 showcased an exhibition on the evolution of mobile phone designs from 1987 till present[1]. When Apple Inc. introduced their first generation iPhone in 2007, Apple established itself as the leader in the Smartphone category. Other phone manufacturers adopted the iconic large touchscreenb that was set as a standard by Apple, to their future phones as well. Consequently, variation in mobile phone designs began to decline, as the options to customize the front view of a Smartphone becomes severely limited. One can argue how much variation there can be if the device consists largely of a rectangular touch screen.

1.2.2 Apple Inc. v. Samsung Electronics Co., Ltd.

Apple Inc. and Samsung Electronics have been in a series of ongoing lawsuits with each other regarding their designs and technology of smartphones and tablet devices. It was initiated by Apple Inc. on April 15, 2011 in the United States, where it sued Samsung Electronics. Apple Inc. claimed that several of Samsung's phones and tablets infringed on Apple's intellectual properties, such as the user interface and style (Kane & Sherr, 2011). The devices in question include Samsung's Nexus S, Galaxy S 4G and Galaxy Tab. Apple Inc. provided the lawsuit with an image, showing a side-by-side comparison of Apple's iPhone 3GS and Samsung's Galaxy S i9000, in order to illustrate that Samsung deliberately chose to copy Apple's products (Exhibit 2). In return, Samsung Electronics counter-sued Apple Inc. on April 22, 2011, alleging that Apple infringed some of Samsung's patents regarding mobile-communication technologies

---

[1] A photographic overview of the exhibition was made by DesignBoom.com, which can be viewed on the following URL: http://www.designboom.com/technology/docomo-phones-celebrate-20-years/

(Bloomberg, 2011). This back and forth suing of Apple Inc. and Samsung Electronics lasts till this day.

Lawsuits were fought in many trials across multiple countries. There is no clear consensus regarding the alleged claims made by both companies across all countries. In the US, the court favored Apple Inc., awarding the US-based company more than 1 billion US dollars in damages on August 24, 2012, though this was decreased to 890 million US dollars on November 21, 2013 (The New York Times, 2013). In South Korea, the court's ruling stated that Apple infringed on two of Samsung's patents, while Samsung infringed on one of Apple's patents, resulting in small fines and a temporary ban of the sales of the infringing devices (Wired, 2013). Japan's court on the other hand concluded that Samsung Electronics did not violate Apple's patents and awarded Samsung with legal costs being reimbursed by Apple (The New York Times, 2013). German courts favored Apple, with the judge stating that there was a "clear impression of similarity" between the Apple and Samsung products in question (AFP, 2011). This verdict resulted in Samsung's Galaxy Tab 10.1 receiving a sales ban in Germany. In the Netherlands, Apple initially sued Samsung, resulting in a ban of three Samsung devices, though this ban was easily lifted after a software update on the banned devices (NRC, 2011). Both companies continued counter-suing, though their claims were rejected by the civil court (BBC, 2012). One of the more unusual verdicts in this case was made in the United Kingdoms, where the court ruling rejected Apple's claim that Samsung copied the Apple iPad. Instead, Apple Inc. was forced to openly publicize in media that Samsung Electronics did not copy their products from Apple Inc. ((The Guardian, 2012). Judging from these events, it is unlikely that the legal conflict between Apple Inc. and Samsung Electronics is going to end on the short run.

1.3 Research Problem and Research Questions

This section will address the purpose of this thesis. The main research problem will be introduced, followed by a set of sub-questions that will be investigated as well.

The main purpose for this study is to explore the role of brand loyalty on consumer responses of product imitation. Consumers loyal to a brand show greater resistance to persuasion tactics from competitors, e.g. advertising (Dick & Basu, 1994). Additionally, very loyal consumers are emotionally attached to their preferred brand, which may lead to them to regard the unique traits of their brand significantly more important. If a copycat brand were to imitate the product of a leader brand, loyal consumers of the leader brand can possibly retaliate in defense, as they view this action as a threat to the 'uniqueness' of their brand. The severity of the retaliation is expected

to be less, if consumers are less loyal, as they lack the strong emotional ties to the leader brand. Therefore, the main research question of this study is:

- o *What role does brand loyalty play in product evaluations where product imitation is present?*

The main question of this study covers a wide area in the topic. In order to isolate the exact findings this study wishes to uncover, several sub-questions were formulated as well:

- *Does the effect of brand loyalty differ, when the degree of product imitation is different?*
- *How does the effect of brand loyalty towards the leader brand differ from brand loyalty towards the follower/copycat brand?*
- *Does brand loyalty affect perceived similarity between the product of the leading brand and the follower brand?*

1.4 Justification for the Research

Brand imitation is wide spread and is present in many of the current markets (Scott-Morton & Zettelmeyer, 2004). The risk of lost sales or even damaged brand equity from brand imitation is a serious matter that brands are aware off (Zaichkowsky & Simpson, 1996). There are cases where companies claim to have lost billions of US dollars in sales, due to imitation, such as in the case of Apple Inc. and Samsung Electronics (The Verge, 2012). Figures as these make it important to have a better understanding of brand imitation and how consumers respond to it.

In addition, Apple Inc. and Samsung Electronics are considered to have the most loyal customer base in the product category of Smartphones (Brand Keys Inc., 2013). Recently, both companies have been directly attacking one other in their marketing campaigns with their customer base being involved as well.[2] It is expected that a customer base that is excessively loyal retaliates when the brand of their preference gets attacked. Brands represent human traits that consumers associate themselves with (Aaker J. L., 1997). If one would act negatively towards a brand, e.g. imitating a product, loyal consumers may perceive this as a personal attack.

The significant cost and damage related to brand imitation, and the potential effects of brand loyalty, makes this an ideal topic to study. This thesis will provide valuable insights for both

---

[2]The ads have been well reported by several media sources:
http://news.cnet.com/8301-17852_3-57513782-71/apple-fanboys-fight-back-against-samsung/

researchers and brand managers. Researchers obtain a better understanding of consumer behavior in the presence of brand imitation. Brand managers on the other hand may better understand how to defend their brand from copycats by utilizing or developing brand loyalty in their customer base.

1.5 Scientific Difference

Copycat evaluation is an area that is well researched in the past. However, there is still uncovered terrain, which is left untouched by previous studies. This thesis will contribute to the existing research by analyzing an important consumer characteristics, namely brand loyalty, and what role it plays in consumers' evaluation of copycats. In addition, this research adds a variable that moderates the effect of perceived similarity is a new thought in the field of copycat evaluations. Also, existing brands are used for the role of copycats instead of fictional brands. Table 1-1 provides an overview of related studies and its contributions. At the very end of the table, this thesis is presented with the anticipated contributions.

Table 1-1 Overview of Related Studies

Study	Context	Method	X(IVs) Y(DV)	Contribution
Van Horen & Pieters (2012)	Olive Oil	ANOVA	IVs (1) Perceived Similarity (2) Consumer Mode DV (1) Copycat Evaluation	When leader brand is present, high similarity copycats lose, while moderately similar wins. If leader brand is absent, high similarity copycats win.
Van Horen & Pieters (2012)	Olive Oil/ Chocolate	ANOVA	IVs (1) Perceived Similarity (2) Type of Similarity DV (Copycat Evaluation)	Theme based imitation is more effective than feature based imitation.
Miceli & Pieters (2009)	Groceries	ANOVA	IVs (1) Perceived Similarity (2) Type of Similarity (3) Consumer Mode DV (1) Copycat Evaluation	Consumers in a relational mindset perceive theme-based imitation quicker than in a featural mindset. Attribute based imitation is always perceived independent on mindset
D'Astous & Gargouri (2001)	Luxury Goods & Convenience Goods	ANOVA	IVs (1) Perceived Similarity (2) Goods type (3) Store Image DV (1) Copycat Evaluation	Better imitations are judged better than poor imitations. Store image and the type of good play an important role in explaining consumer evaluations.
[This thesis]Ma (2014)	Smartphones	OLS Regression	IVs (1) Perceived Similarity (2) Follower Brand Loyalty (3) Leader Brand Loyalty	The magnitude and direction of the effect of similarity between the leader and copycat is moderated by the brand loyalty towards the leader brand and follower brand

1.6 Outline of the Thesis

This thesis is divided into seven chapters. The first chapter will show an overview of this paper. It explains the problem orientation; describes the background of the research, research problem and justification of the research; indicates the difference between this thesis and related studies; gives an outline of the thesis, provides the definition of several terms used in this paper; and shows the delimitations of this research.

Chapter two focuses on past findings in the areas that are covered in this research, namely copycat behavior, brand loyalty and perceived similarity. This chapter will give a theoretical framework, which this research is based on.

Chapter three focuses on the formation of the hypotheses. By utilizing past research and findings that were discussed in the previous chapter, hypotheses are formed, which this research attempts to find support for. After forming the hypotheses, a conceptual model is provided to illustrate the findings this paper tries to uncover.

Chapter four describes the methodology that is utilized in this thesis. It first introduces the experimental design, explaining the choices made regarding utilized brands, survey method etc. Next, the pre-test design and results are extrapolated that are used to select the images used for the study. Finally, the experimental design of the main tests are explained. Throughout the chapter, different scales are clarified that are used in his study.

Chapter five focuses on the results and findings from the main study. It provides an overview of the descriptive statistics and shows the results of several preliminary analyses that test the reliability of the data. It is followed by the testing of the hypotheses and ends with a summary of the results.

Chapter six discusses the findings and results of the previous chapter in depth. Instead of using a statistical perspective to observe the findings, this chapter discusses the implications of the findings and the effects it has on current scientific and managerial knowledge.

The thesis ends with chapter seven, which is the conclusion. It provides a short summary of the findings of this paper. The thesis is then concluded with the implications of the findings on the case between Apple Inc. and Samsung Electronics.

1.7 Definitions

This section explains several terms that are used in this thesis, to avoid any confusion for the reader.

1.7.1 Objective and Subjective Similarity

The terms objective similarity and subjective similarity are often used in this thesis. It is important that the two terms are distinguished from each other. Similarity indicates to which degree two products are alike in appearance. The degree of similarity of two products is measured by questioning participants on their perceived similarity between two products. How participants perceive similarity may be influenced by already existing constructs in their minds, e.g. brand preferences or country of origin. Perceived similarity may therefore be biased if participants are able to identify certain visual clues or are provided with certain knowledge on the products (e.g. brand, origin, price etc.). What is measured here is the *subjective similarity*. However, if we were to remove all visual clues and have the participant be uninformed on factors such as brand or origin, an unbiased perceived similarity is measured. This unbiased perceived similarity will be referred as *objective similarity*.

1.7.2 Brand Leader, Follower Brands, Imitation Brands and Counterfeit Brands

Brand leaders are brands that are most widely recognized by consumers in a particular market segment. While it is often the case that brand leaders are also the market leader, i.e. most sold products in a particular market segment, it is not a requisite. On the contrary to many previous studies, this study does not use *counterfeit brands* that attempt to trick consumers into thinking that they are the leader brand. Instead, this study uses *follower brands*; a brand that is not the brand leader in a particular market segment. Follower brands do not attempt to create brand confusion. However, follower brands are not excluded to imitate visual features from the brand leader in their own products. In the cases where a follower brand utilizes copycat strategies, it becomes an *imitation brand*. Alternatively, the term *copycat brand* may be used as well to indicate imitation brands.

1.7.3 Attribute-Based and Theme-Based Imitation

There are two types of imitations that have been covered by past studies. The first is attribute-based, or featural imitation. Attribute-based imitation is the copying of perceptual elements that are considered to be low-order, such as shapes, colors, font, name etc., in their own products or logos. Second is theme-based imitation. Theme-based copycats imitate more abstract

characteristics and semantic attributes, e.g. feelings, atmosphere etc. Examples of both types of imitation can be seen in Exhibit 2.

1.8 Delimitations

Firstly, this research will mainly focus on attribute-based similarity instead of theme-based similarity. The study centers on the case between the already existing brands of Apple and Samsung. This holds that theme-based similarity is difficult to achieve, consumers have already build up an image in their mind regarding the two well-known brands. More abstract theme-based imitation are seen as a larger threat to leader brands (Miceli & Pieters, 2010). However, additional research will need to be done to analyze if loyalty also has a moderating effect on theme-based imitation strategies.

Secondly, the scope of this study is on the smartphone market. Findings and conclusions from this study may not apply or have limited application to markets that are unrelated to electronic devices, such as convenience goods.

Lastly, the products used in this study are not counterfeit products. Brands used in this study are clearly distinguishable, making brand confusion whereby the consumer confuses one brand for another unlikely to occur. Therefore, the results that this study will produce apply to imitation, and not to counterfeiting.

CHAPTER 2: THEORETICAL FRAMEWORK

2.1 Introduction

Imitation and counterfeit brands imitate product attributes of a leading brand, e.g. the name, logo, package design or even complete products of a leader brand (Zaichkowsky & Simpson, 1996). These brands may be penalized, if they are perceived as intentionally misleading consumers regarding the true quality of their product (Cambel & Kirmani, 2000). However, it is better to prevent consumers from purchasing imitated products, than to claim losses back in future court cases. Therefore, understanding why consumers buy imitation deliberately is more crucial than fighting against the imitation and counterfeit brands (Wee, Tan, & Cheok, 1995).

This chapter will review past studies and their findings on the subject. The topic of this thesis will cover 3 different areas of interest, namely; brand imitation/copycat behavior, brand loyalty and perceived similarity by consumers. Therefore, this chapter will be divided into 3 main sections, with each section covering each one of the areas of interest. Each section will review past findings by existing studies and researches in order to gain a deeper understanding on this topic. The first section discusses the inner workings of brand imitation/copycat behavior from both a brand owner's perspective as well as the consumers' perspective. This will be followed by an overview of our current understanding of brand loyalty and its implications on consumer behavior. How consumers perceive similarity between two identities will be discussed last in the third section.

2.2 Copycat Behavior

Imitation brands attempt to free-ride on positive brand-associations build by the leader brand, a so-called copycat strategy. Copycat practices become close to a natural response, if a firm faces high uncertainty in the environment it operates in (Lieberman & Asaba, 2006). Funding innovation is a risky investment for firms who are unable to process the information in this environment and may result in a costly gamble. As these firms lack the processing ability, they will instead observe successful firms, who the copycats assume are better able in processing the information (Bikhchandani, Hirshleifer, & Welch, 1998). Likewise, the more successful a firm was in the past, the more likely they are to be successful in the future. In addition, a new product that proved itself to be successful often indicates a newly discovered segment in the

market ((Kapferer, 1995). Imitation brands are able to react quickly with few risks or costs, by introducing an imitation product into the market.

The reason copycat strategies are even possible, is due to the presence of brand confusion, which in turn is caused by the fact that consumers are unable to process the load of information, in order to make brand choices (Jacoby, 1977; Malhotra, 1982). The definition of brand confusion is often not made clear in literature (Foxman, Berger, & Cote, 1992). However, Foxman et al (1992) provided an improved definition of the term:

Consumer brand confusion consists of one or more errors in inferential processing that lead a consumer to unknowingly form inaccurate beliefs about the attributes or performance of a less-known brand based on a more familiar brand's attributes or performance.

Brand confusion can be the result of similarities between the characteristics of two or more features, with higher degree of similarity increasing the inaccuracy of an individual's inferential processing. A higher similarity in product features results in stimuli that are perceived to be more similar by consumers, followed by a higher likelihood of brand confusion occurring. These copycat brands exploit this confusion by tapping into previously stored information in the memories of consumers. Positive information of a leader brand can be activated by the sight of the copycat product, due to this confusion. If this occurs, a copycat product can be evaluated more positively and closer to the leader brand (Van Horen & Pieters, 2012). However, brand confusion differs from related processes, e.g. uncertainty, miscomprehension, infringement and deception. A summary of the differences between these processes and brand confusion are in table 2-1:

Table 2-1 The Differences between Brand Confusion and Related Processes

Process	Difference from Brand Confusion
Uncertainty	Consumer is aware of the potential error. Uncertainty is less likely to affect brand choice, but instead will delay choice until more information is available.
Miscomprehension	Consumer misinterprets a message, resulting in a discrepancy between the intended message of the brand and the received message by the consumer.
Infringement	A product is found to be too similar to another product by the court. It is important to note that brand confusion is not a necessity for infringement to take place. Infringement is determined by a judge, and not by the fact if brand confusion truly takes place or not.
Deception	Comparison of different brands is not necessary. The key point is that there is a discrepancy between the product characteristics and those that are claimed by the marketer.

In practice, copycat strategy is the application of brand confusion in the marketing strategy of a brand. Copycat brands imitate the name, logo, package design or even products of competitor firms, with the belief that they can benefit from being similar to competitors. Copycat practices are not a rare phenomenon in the current market. On the contrary, copycat behavior is a common and widespread occurrence; a national survey of US supermarkets concluded that half of the store brands imitated the packaging of a leading brand in terms color, size and shape (Scott-Morton & Zettelmeyer, 2004). Leading brands will naturally seek to protect and maintain the competitive advantage they obtain from innovating and having a first-mover advantage. However, it has been shown that successful innovators can seldom prevent the entry of imitating firms (Lieberman & Montgomery, 1988), which may lower profits of the leading brand.

The common belief is that by being visually more similar to the leading brand, positive associations linked to the leading brand will be triggered and transferred to the copycat brand, resulting in a better evaluation of the copycat. It has been thought that consumers evaluate unfamiliar products by using visual similarity to a more known product in the same product category. Previous studies have demonstrated that consumers indeed use visual similarity as a cue to determine perceived similarity between multiple products (Warlop & Alba, 2004). As

perceived similarity grows, perceived substitutability may grow as well. This in turn may possibly lead to consumer accepting the copycat more easily as an established product inside this product category and therefore see it as a possible alternative to the leading brand (Loken & Ward, 1990). Using this logic, one would expect that a higher degree of imitation, i.e. higher similarity between the leader brand and copycat, would lead to a larger transfer of positive associations and therefore to a better evaluation of the copycat brand. However, past research has indicated that copycats who adopt a high-similarity imitation strategy are not necessarily evaluated better than non-copycats when they are compared to the leader brand (Van Horen & Pieters, 2012; Warlop & Alba, 2004). Transferred associations are possibly not an accurate representation of the quality of the imitator in reality, as it is mostly based on visual cues. This in turn can lead to negative consequences, for dishonesty towards consumers in terms of the quality of the copycat. In cases of high similarity, consumers may perceive this as blatant imitation with the intent to mislead the consumer, resulting in them 'punishing' the copycat (Cambel & Kirmani, 2000). Instead, it was found that moderately similar copycats were evaluated better than both low similar and high similar copycats (Van Horen & Pieters, 2012), as consumers transfer some positive associations from the leader brand to the copycat, but do not perceive this as intentional deceit.

It is recognized that there are two types of copycat strategies: attribute-based, also known as feature-based, and theme-based copycats (Miceli & Pieters, 2010). Attribute-based copycats imitate perceptual elements of leading brands that are considered to be low-order, such as shapes, colors, font, name etc. These copycats attempt to be literally the same as the leader brand and can therefore share many visual similarities with the leading brand it copies from, making the intentions of the copycat brand more obvious to the general public. This is supported by the fact that the majority of court cases concern cases with attribute-based copycats (Miceli & Pieters, 2010). While attribute-based imitation is relatively easy to use, it does not necessarily result in the desired result. High attribute-based similarity can backfire when consumers evaluate the imitation brand in a comparative environment (Van Horen & Pieters, 2012).

The second type of copycat strategy is a theme-based copycat strategy. On the contrary to attribute-based copycats, theme-based copycats imitate more abstract characteristics and semantic attributes, e.g. feelings, atmosphere etc., from a leading brand through its visual presentation. These abstract higher-order characteristics are also known as 'themes'. It is possible for consumers to assess two products as similar, when the products share a common theme, despite the two products being visually very dissimilar. Exhibit 2 shows an example

attribute-based and theme-based imitation of a leading brand. While one might think that attribute-based copycats, which are directly connected to the leader brand, generate a more positive image than theme-based copycats, which are indirectly connected to the leader brand, the truth is far from this. It has been shown that theme-based copycats are evaluated better by consumers, are not perceived as unfair imitation and tend to be overlooked by lawyers and courts (Van Horen & Pieters, 2012). These less observable or recognizable theme-based copycats are therefore a far larger threat than the more blatant attribute-based copycats.

With past studies regarding Copycat Behavior being reviewed, this paper will continue to the next section; Loyalty.

2.3 Loyalty

Customer loyalty is seen as an important factor to operational success and profitability (Oliver R. , 1997). As a result, topics related to customer loyalty have been covered frequently by research. It is often viewed as the strength of the relationship between a consumer's attitude and repeated purchases (Dick & Basu, 1994). A good description is provided by Oliver (1999):

A deeply held commitment to re-buy or re-patronize a preferred product/service consistently in the future, thereby causing repetitive same-brand or same-set purchasing, despite situational influences and marketing efforts having the potential to cause switching behavior.

Most firms understand the positive impact of having a loyal customer base on future profits. As observed by Reichfeld, Markey and Hopton (2000), a 5 percentage point increase in customer retention, which is one of the main effects of customer loyalty, consistently resulted in increases in profits between 25% and 100%. Alongside the benefit of higher retention of customers, Aaker (1991) also noted that customer loyalty leads to reduced marketing costs, higher customer acquisition rates and greater trade leverage. More marketing advantages were stated by Dick and Basu (1994). Higher loyalty decreases the amount of effort consumers put in searching for information about the product. Instead of requiring complicated processing and evaluation of products to occur, consumers respond fairly automatically to products. Also, loyal customers are more likely to spread positive word-of-mouth advertising and show a higher resistance against marketing activities of competing brands. Brands with a loyal customer base have been measured to have higher market shares and are allowed to maintain higher relative prices, compared to brands with less loyal customer base (Chaudhuri & Holbrook, 2001). These

astounding benefits are likely the reason that the central goal of a firm's marketing activities is to develop and build customer loyalty.

2.3.1 Static Loyalty

Customer loyalty consists more of repeated purchases only. As Dick and Basu (1994) pointed out, high repeat patronage may not always point out to loyalty, as this behavior is only one dimension of a more dynamic customer loyalty. A framework was developed where customer loyalty is the relationship between the *relative attitude* toward a brand and the *purchase behavior*. This holds that a consumer who has high repeated patronage is possibly not loyal, if its relative attitude towards the brand is low. For instance, one person may always do its groceries in a supermarket, called X, which is located close to its house. However, he only does so out of convenience in terms of travel time. If a new supermarket would open that is located more favorably, this person is likely to switch to the new supermarket, as it holds no strong attitudinal preference towards X. These types of customers are considered to be spuriously loyal. Then there are consumers who are have a strong relative attitude towards a brand, but due to situational circumstances are not able to show repeated patronage. For example, a person who was a repeated purchaser of a product of brand X, but due to a loss of income, this person could not continue purchasing this brand, regardless of the person's preferences. This type of loyalty is called latent loyalty. The conceptual framework with two dimensions, behavioral and attitudinal, is widely used as the basics of understanding customer brand loyalty. Figure 2-1 shows a summarized overview of the framework developed by Dick and Basu (1994).

Figure 2-1 Related Attitude-Behavior Relationship Scheme

Repeat Patronage

Relative Attitude		High	Low
High		Loyalty	Latent Loyalty
Low		Spurious Loyalty	No Loyalty

2.3.2 Dynamic Loyalty

The previous model illustrates customer loyalty in a static sense; customers are allocated in one of four categories. Oliver (1997) developed a 4-stage model with more dynamic elements integrated into it. He argues that consumers become loyal in separate phases, where in each

phase the attitude of the consumer towards the brand develops. Initially, consumers are loyal in a cognitive sense, followed in an affective sense, then in a conative sense, which is concluded by a behavioral/action stage.

Cognitive loyalty: repeated purchases in this stage are determined by the perceived value that the consumer believes to receive when purchasing a product, compared to alternatives. Perceived value is defined as "customers' overall assessment of the utility of a product based on perceptions of what is received and what is given" (Zeithaml, 1988). In plain words, it holds that consumers mainly are concerned about the objective performance and quality attributes of the product. Routinely transitions in this stage might not even be perceived as a matter of satisfaction or not. Loyalty levels in this stage are generally observed as weak and shallow (Oliver R. , 1997; Oliver R. L., 1999), as the consumer shows no emotional attachment to the brand.

Affective loyalty: the loyalty in this stage is stronger than in the previous stage. Customers relate the product/brand to pleasurable fulfillment and have a favorable attitude towards it. As the name of this stage suggests, consumers are affectionate towards the brand/product. In other words, they 'like' the product/brand and it provides them satisfaction. However, consumers in stage are still prone to switching, as it was observed that customer who claim to be satisfied or very satisfied defect between 65 and 85% of the time (Reichheld, Markey, & Hopton, 2000).

Conative loyalty: as affective loyalty is not sufficient, firms need to push further through the stages. According to Oliver (1997), conation is "an intention or commitment to behave toward a goal in a particular manner". Someone in the conative stage portraits a strong desire to repurchase a brand, similar to motivation. However, this only holds that the intention is present and that external factors might prevent the actual purchase, as in the case of latent loyalty in Aaken's (1994) model. As this stage is higher than previous ones, the loyalty of consumers who have reached this stage are also higher than in previous stages.

Action loyalty: previous stages mainly covered mainly the intentions and commitment to purchasing a brand/product, but did not cover the actual purchase itself. In this stage, the intentions formed by previous stages are translated into action. Consumers in this stage are willing to overcome obstacles to meet its desires, that would otherwise prevent one from doing so (Oliver R. , 1997; Oliver R. L., 1999). This stage finalizes the loyalty framework from building interest, developing intentions and taking action

Figure 2-2 Four-Stage Loyalty Framework

| Cognitive | ⇨ | Affective | ⇨ | Conative | ⇨ | Action |
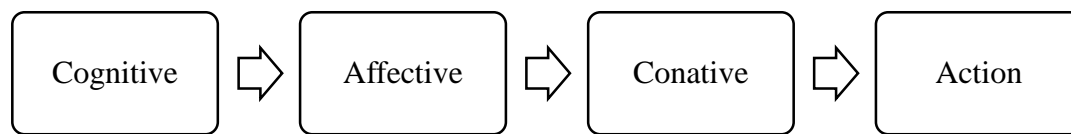
As stated in the introduction of this chapter, three areas of interest are discussed in this chapter. This this section rounded up, this chapter continues to its final section and topic; Perceived Similarity.

2.4 Perceived Similarity

The appearance of a product, and brand identity are key elements to achieve success in the market with a product (Block, 1995). Consumers perceive the identity of a product through their visual senses, which they then use to identify visual cues (associations linked to certain perceptual attributes) of those products. Intuitively, similarity is a result of one creating a comparison between two entities, in terms of commonalities and differences in their visuals/features. These are then processed by the brain to 'calculate' the extent of similarity between the two entities (Tversky, 1977). The more commonalities relative to the differences, the more similarity is perceived. These commonalities include attributes such as color, shape, graphical elements or even names. However, individuals can also perceive similarity in more areas than visual attributes. Abstract thematic similarities affect the perceived similarity between entities as well (Estes, 2003). These theme-based similarities are feelings/associations/emotions that two entities share in common. For instance, Estes (2003) gave the example that milk is judged more similar to coffee than to lemonade. While attribute wise, milk is not more similar to coffee than to lemonade. Theme-wise, milk is more similar as they share a thematic relationship (milk is poured into coffee). The same holds for Blackberry phones, Apple iPhones and briefcases. Blackberry phones are more similar to briefcases from a theme-wise perspective than iPhones, as both Blackberry phones and briefcases are associated with businessmen.

2.4.1 Consumers' Mind

It should be noted that the objective similarity, i.e. how many characteristics products objectively share in common, may not be the same as the perceived similarity by consumers.

21

As stated in the definition by Foxman et al (1992), brand confusion is the result of processes in the consumers' mind. This holds that, with the same stimuli, the extent of brand confusion can still differ between individuals, as inferential processing capabilities vary between them. The difference originates from cognitive style that each person has, which determines how one processes information. The individual's cognitive style is mainly determined by four independent elements:

Leveling - Sharpening: Individuals can be categorized as cognitive levelers or cognitive sharpeners (Kelman & Cohler, 1975). Sharpeners actively search for unique distinct details that may remove ambiguity. Levelers attempt to fit new experiences into familiar ones. Sharpeners are therefore better equipped to differentiate similar products and are less prone to brand confusion, compared to levelers.

Conceptual Differentiation - Equivalence Range: Conceptual differentiation stands for to what extent a stimuli has to be different before it becomes a noticeable difference to the individual (Gardner, Jackson, & Messick, 1960). An individual with high conceptual differentiation /narrow equivalence range will only perceive similarity in stimuli, when very high similarity is present. Individuals with low conceptual differentiation/broad equivalence range will already perceive similarity at a margin. Therefore, individuals with high conceptual differentiation are less prone to experience brand confusion, as one can perceive differences more accurately.

Reflection - Impulsivity: Reflectivity of an individual determines to what extent one considers alternative solutions to problems in highly uncertain environments (Brodzinsky, 1985). Reflective consumers are expected to experience brand confusion less than impulsive consumers (Foxman, Berger, & Cote, 1992), as past research found that reflective individuals are better at visual assessment (Schwabish & Drury, 1974). As a result, these individuals will go through meticulous inspection of stimuli, before any choice is made.

Field Dependence - Independence: Field dependence stands for the extent that a consumer incorporates background information to the processing of stimuli. Field independent consumers are able to ignore irrelevant background information and focus on the stimuli of interest, while field dependent consumers respond to the complete environment including background (Marincola & Long, 1985). Therefore, field-independent consumers are more able to identify and categorize specific brand stimuli and are expected to experience less brand confusion, than field-dependent consumers.

Miceli and Pieters (2008) proposed that the product characteristics are not the only determinants of perceived similarity between products. The authors suggested that depending on the mindset of the individual, it would pick up more similarity in some cases than in others. Two separate mindsets were conceptualized; a featural mindset, where the individual focused mainly on the literal similarity between two entities, and a relational mindset, where individuals are able to perceive similarity on a more abstract level. They demonstrated that more similarity is perceived when products share attribute-based similarities compared to theme-based similarities. In addition, consumers in a relational mindset were able to pick up theme-based similarities more easily than consumers in a featural mindset.

The cognitive style of a consumer is however not fixed throughout its lifetime. The brand experience of a consumer, which consists of brand knowledge and brand importance, is believed to directly affect the cognitive style (Foxman, Berger, & Cote, 1992). For example, more exposure to a brand can broaden ones equivalence range, as one gets more familiar with the brand and therefore is more able to perceive minute differences of a different product. Therefore, a consumer with more brand experience is less likely to experience brand confusion, compared to a consumer with less brand experience, ceteris paribus. Past research has also shown that brand experience has an impact on consumer behavior as well; the more experience a consumer has with a brand, with more loyal they in general are to this brand (Brakus, Schmitt, & Zarantonello, 2009). The logical question that follows from the findings mentioned above is if brand loyalty affects a consumer's cognitive style, therefore causing the consumer becoming less prone to brand confusion.

CHAPTER 3: HYPOTHESIS FORMATION

3.1 Introduction

Existing research has already covered the topics of interest thoroughly, which are *Copycat Evaluation, Brand Loyalty* and *Perceived Similarity*. However, there remain gaps in the research of this field, which are mainly located at where the topics of interest intersect. To the best of my knowledge, there has been no extensive research on the role and influence of brand loyalty on the evaluation of copycats or on the perception of similarity between two different entities. In addition, previous studies on copycat behavior utilized non-existing brands as copycats, Existing research overlooked that copycat behavior may not be limited to small unknown brands only, as indicated by the lawsuit between Apple Inc. and Samsung Electronics.

The identified research gaps justify for more research in this topic. This is the prime motivation for the conduction of this research. The following sections explores how the research gaps can be filled up and discusses the hypotheses of this research. Finally, a summarized model will be created that provides an overview of the scope of this research.

3.2 Loyalty and Perceived Similarity

This research proposes that there is a difference between the objective similarity of two products and the similarity that a consumer perceives, as perceived similarity can differ between different individuals, even though the compared products are exactly the same. In general, the higher the objective similarity between two products, the higher the perceived similarity is between them. Consumers who are loyal to a certain brand will have more brand experience, compared to individuals who are less brand loyal. More brand experience should then affect one's cognitive style, such that the individual is less prone to brand confusion, as this person can distinguish distinct differences between products with more ease compared to an individual who has less brand experience. As this individual can perceive differences easier, he/she will perceive less similarity between two products. In this sense, the extent that an individual perceives objective similarity between two products is negatively moderated by the extend of the individual's brand loyalty. The hypothesis that is constructed is as follows:

H_1: *Increased brand loyalty has a negative moderating effect on the relationship between objective similarity between two products and perceived similarity by the consumer.*

**Figure 3-1 Moderating Effect of Loyalty on Objective Similarity**
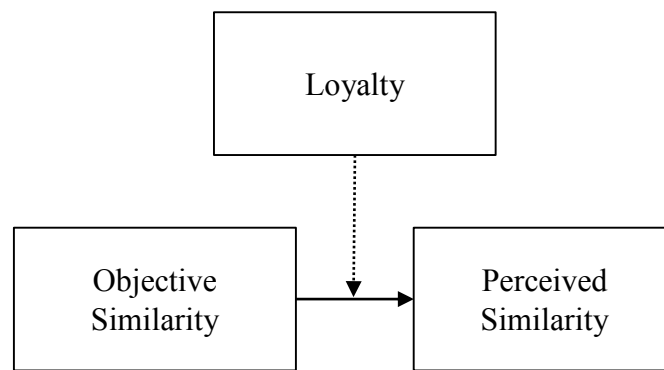
3.3 Copycat Evaluation and Loyalty

Copycat behavior is not evaluated the same in every case of imitation, as there are many variations in copycat strategies. It was found that consumer evaluation of the copycat is determined by several factors, such as the degree of imitation or the brand loyalty of the consumer. Consumers who are loyal to the leader brand are expected to perceive more differences between the leader brand and the copycat, resulting in a lower perceived similarity and lower transfer of positive associations. This in turn is expected to result in a decrease in the evaluation of the copycat. Furthermore, loyal consumers are more resistant to persuasions from competitors (Dick & Basu, 1994). As they assess the imitation strategy more critically, they are more likely to see through the copycat scheme and respond negatively to it. In a sense, consumers 'punish' the copycat as they suspect that the copycat brand has ulterior motives and is attempting to mislead the consumer (Cambel & Kirmani, 2000). This holds that even though loyal consumers perceive a lower similarity between the leading brand and the copycat, they will accuse the copycat for imitation. Loyalty enhances the relative attitude that the consumer has towards the brand as well (Dick & Basu, 1994). This holds that individuals that are loyal towards a brand will have a more positive attitude towards their brand of preference, relative to competing brands, regardless of the objective similarity between products. As a result, loyalty towards the leader brand has a direct negative relationship with the evaluation of the copycat. Therefore, the formulated hypotheses are as follows:

H$_2$: *Increased brand loyalty towards the leader brand has a negative moderating effect on the effect of product similarity on copycat evaluation*

H$_3$: *Increase brand loyalty towards the leader brand has a negative direct effect on copycat evaluation.*

Figure 3-2 Direct and Moderating effect of Loyalty towards the Leader on Objective Similarity
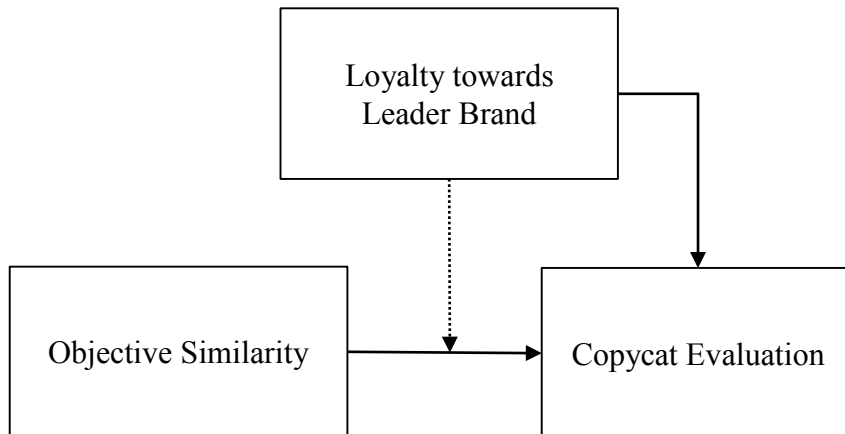

Past studies have mainly used copycat brands that did not exist in the real world and were fabricated specifically for the research. An important difference that sets this research apart from previous studies is the fact that a well-known brand will be used as the copycat brand, i.e. Samsung Electronics, in addition to a lesser known brand. This introduces a new factor in the model, namely; how does loyalty towards the copycat brand affect the copycat evaluation? In previous studies on copycat behavior, the usage of fabricated brands prevented researchers to analyze how consumer attachment to the copycat brand affects the copycat behavior. In a market where imitation is not exclusive to unknown brands, gaining knowledge on how consumers respond to copycat behavior from known brands is valuable. Also, does the copycat evaluation differ if the copycat brand is a well-known brand compared to if the copycat brand is a lesser known brand?

The direct effect between loyalty towards the copycat brand and the copycat evaluation is clear; higher loyalty towards a brand leads to a higher evaluation of the brand. On the other hand, the moderating effect of loyalty towards the copycat brand seems to be ambiguous. It is possible that the moderating effect is no different from the moderating effect in hypothesis H_2. Loyal consumers may have adored the product for reasons of 'uniqueness' (Dick & Basu, 1994). If their brand of preference starts to show copycat behavior, it loses its uniqueness, resulting in a lower evaluation by the consumer. On the other hand, it is possible that loyal consumers to the copycat brand are indifferent to any copycat behavior shown by their brand. Their loyalty may make them tolerate this behavior, resulting in no moderating effect at all. Therefore, the following hypotheses are formed:

H_4: *Increased brand loyalty towards the copycat brand has a moderating effect on the effect of product similarity on copycat evaluation*

H_5: *Increase brand loyalty towards the copycat brand has a positive direct effect on copycat evaluation.*
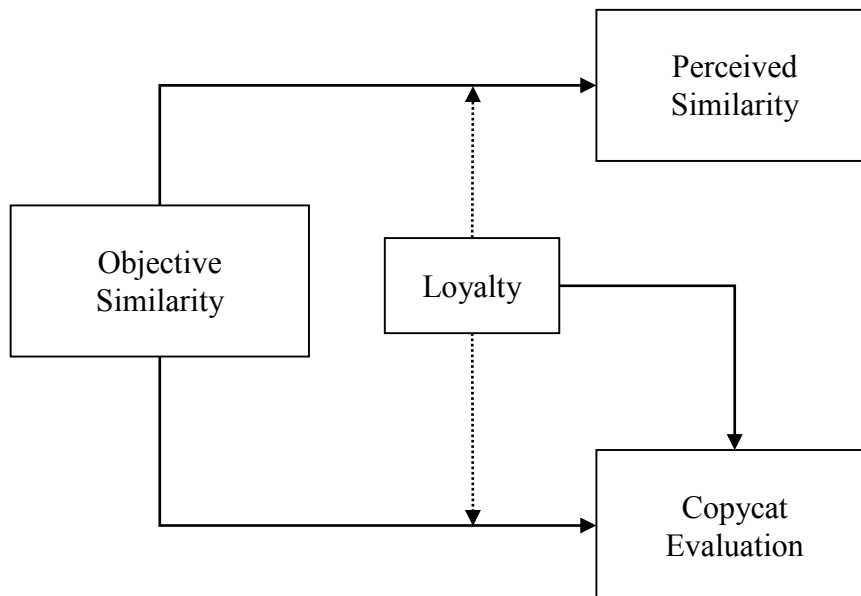
Figure 3-3 Direct and Moderating Effect of Loyalty towards the Copycat on Objective Similarity
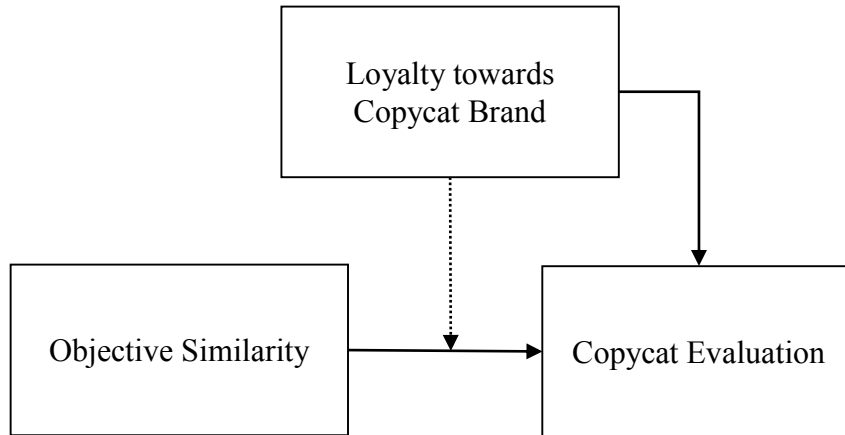
3.4 Conceptual Model

By combining the different hypotheses, a complete conceptual model can be created. This provides an overview of the relationships that are present in this research.

Figure 3-4 Conceptual Model

CHAPTER 4: METHODOLOGY

4.1 Experimental Design

This section will go into more detail about the brands that are present and the experimental design used in this research. Furthermore, it will provide the motivation behind the design choices.

4.1.1 Justification of Brands

The main inspiration for this research is the legal case between Apple Inc. and Samsung Electronics. Therefore, it would be fitting to use these two brands in this research. Apple was assigned to be the leader brand for several reasons. Apple Inc. is recognized as being the most valuable and recognized brand in the world by several organizations (WPP, 2013; Interbrand, 2013). In addition, Apple Inc.'s recently released iPhone 5s remains to be the top selling Smartphone at every major U.S. carrier, topping Samsung's Galaxy S4 (Cole, 2013). This justifies to use Apple Inc. as the leader brand and Samsung Electronics as the follower brand in this research.

In addition to Samsung Electronics, a second brand is used as the follower brand. Though an artificial brand could be used to fit the role as in many previous studies, an existing brand was used to increase the realism of the research. In the end, the Chinese brand and smartphone manufacturer Oppo was chosen. There are several reasons why this brand was chosen and how it fits the requirements that are needed. Around two-third of all imitation and counterfeit goods originate from China (UNODC, 2013). By originating from a country that has a reputation of imitation goods, Oppo can be seen as a suitable choice for a brand that imitates a leader brand such as Apple Inc. Secondly, Oppo's operations are currently limited to the borders of China. This holds that consumers that are used in this research as likely not familiar with the brand. These factors make Oppo an appropriate follower brand next to Samsung Electronics.

4.1.2 Experiment Structure

This paper utilizes a factorial design, which is often used in marketing research. A factorial design allows us to observe differences in the dependent variable when two or more variables are manipulated. These variables should have two levels of values each that they can take. For this research, the *degree of similarity* could have a high similarity rating or a low similarity

rating and the *follower brand* could be Samsung or Oppo. By varying the two variables through a factorial design, we can observe their influence on the consumer evaluations.

A between subjects design was deliberately chosen for this experiment. A major concern when using a within subjects design is the potential carryover effects, where the first treatment affects the second. In this case, participants that see an image of a low similarity smartphone, followed by an image of a high similarity smartphone may perceive more similarity in the second case due to the relative difference between the two cases, even though the participant may have perceived less similarity if it was shown the image of the high similarity phone exclusively. Issues with a between subject design are avoided by assigning participants to each treatment at complete random, minimizing any individual variability between the groups.

4.1.3 Survey Method

Due to the large number of participants that are needed for this study, traditional methods of data collection, e.g. by physically gathering participants or requesting bystanders in public, become unpractical or too costly. Therefore, data collection through online channels is employed, due to its larger reach and practicality.

Qualtrics[3] is used to construct the survey, due to its versatile set of tools of randomization of participants, randomization of images and display options. However, Qualtrics is not used to distribute the survey. The Mechanical Turk[4] of Amazon is utilized as the distribution platform for the online survey constructed in Qualtrics. The Mechanical Turk is a crowd sourced-based internet platform where individuals, known as *workers*, can perform tasks, known as a *HIT*, for monetary compensations. The surveys for this paper are posted on the Mechanical Turk where participants are directed to the survey created on Qualtrics. At the end of the survey, Qualtrics provides a unique code that the participants have to fill in on the Mechanical Turk website, linking each workers with each respondent on Qualtrics. Every worker is immediately blocked after he or she has performed a single hit, preventing them from repeatedly filling in the survey.

The monetary compensation was calculated by estimating the amount of time participants have to put in completing a survey. The pre-test takes significantly less time to complete, due to having fewer questions than the main test. Consequently, the pay-off for completing the pre-test is less than the main test.

---

[3] For more information, visit http://qualtrics.com/
[4] For more information, visit https://www.mturk.com/mturk/

4.2 Pre-Test

The survey uses two different illustrations for the follower Smartphone, in this chapter known as *the pair*, one that is characterized with high physical similarity with the Apple Smartphone and one that has low physical similarity with the Apple Smartphone. The illustrations of *the pair* have to meet several requirements in order for any future conclusions to be reliable. Firstly, they have to differ in similarity to the Apple Smartphone, as measuring the difference in results in cases with different degrees of similarity is one of the main goals of this research. Secondly, *the pair* should not differ from each other in terms of their attractiveness. All undesired factors that may affect the evaluation of the Smartphone should be kept at a minimum. The attractiveness of a Smartphone will evidently have an influence on the Smartphone evaluation. If *the pair* differ in attractiveness, differences in the evaluation may not be exclusively originate from the differences their degree of similarity with the Apple Smartphone. Therefore, a pre-test was run in order to obtain the ideal pair of designs to be used for this research.

4.2.1 Pre-Test Design

Twenty-two Smartphones were designed, with each their own physical features. From these, four were chosen that seemed most realistic through careful evaluation. Two colors were used, namely black and white. Finally, two different user interfaces were designed, resulting in sixteen possible combinations. This pool of sixteen Smartphone designs will go through the pre-test, where two designs will be selected to be used in the main test. The pool of sixteen Smartphones are shown in Exhibit 3.

On the contrary to previous studies that use within subject designs for their pre-tests, this pre-test will utilize a between-subject design. The motive behind this is to again obtain more robust results. If participants in the pre-test are shown a series of images, they might be subject to a learning effect. As they see more Smartphones, they learn to see differences with more ease. In the main test, participants will only observe one Apple Smartphone (Exhibit 4) and a single follower Smartphone. In order to make the results of the pre-test compatible to the main test, each participant of the pre-test should only see one Apple Smartphone and a single follower Smartphone as well.

In the pre-test, participants are first shown an image of a randomly selected follower Smartphone out of the pool of sixteen Smartphones without the Apple Smartphone. All major brand indications are removed from the images, in order to obtain objective evaluations from participants, preventing participants' brand preferences to have influence on their judgment.

The attractiveness of the follower Smartphone is measured using a five item nine-point bipolar scale. The five items have been used by previous studies to measure general attractiveness of images used in copycat research (Chattopadhyay & Basu, 1990; Van Horen & Pieters, 2012):

	-4	-3	-2	-1	0	1	2	3	4	
The design is bad	O	O	O	O	O	O	O	O	O	The design is good
I dislike the design	O	O	O	O	O	O	O	O	O	I like the design
The design is not nice	O	O	O	O	O	O	O	O	O	The design is nice
The design is unattractive	O	O	O	O	O	O	O	O	O	The design is attractive
The design is uninteresting	O	O	O	O	O	O	O	O	O	The design is interesting

Following this, participants will once again be shown the image of the Smartphone, but accompanied by an image of the Apple Smartphone. Again, indicators of brands are removed and kept at a minimum. A question follows asking participants to indicate the similarity between the two Smartphones. This method of measuring similarity between two products was used in past research as well (Loken, Ross, & Hinkle, 1986; Miceli & Pieters, 2010; Van Horen & Pieters, 2012).

	-4	-3	-2	-1	0	1	2	3	4	
Completely dissimilar	O	O	O	O	O	O	O	O	O	Complete similar

The survey concludes with control questions regarding physical features of the image they saw, e.g. "What was the color of the Smartphone?" These questions are in place in order filter out participants who are not filling in the survey attentively.

4.2.2 Pre-Test Results

This section discusses the results obtained from the pre-test. In total there were 394 observations made in the pre-test. Observations that failed to answer the control questions or that were made by the same person were excluded. This resulted in a total sample size of 275 unique participants. Before initiating the analysis, the scale used in the pre-test measuring the attractiveness of the design needs to be tested for reliability. Cronbach's alpha was successfully used to assess and confirm that the 5 item scale is reliable. With a Cronbach's alpha coefficient of 0.929, it can be concluded that the reliability is very satisfactory.

The following table shows the descriptive statistics obtained from the pre-test, with each Phone representing each design used in the pre-test. As the table shows, each smartphone generally scores relatively high in the attractiveness evaluation (> 6.4), while similarity has a wider range, with the lowest being rated= 3.12 and highest= 6.56.

Table 4-1 Pre-Test Results

Phone	N	Similarity Mean	Evaluation Mean
1	14	5,57	6,74
2	**14**	**3,79**	**7,41**
3	17	4,59	7,42
4	19	3,89	7,15
5	16	5,44	7,21
6	17	3,12	7,02
7	19	4,84	7,64
8	18	5,17	7,51
9	20	6,00	7,37
10	19	4,74	6,94
11	**16**	**6,56**	**7,34**
12	15	6,07	7,20
13	19	5,53	6,44
14	21	4,81	6,68
15	14	4,07	6,60
16	17	4,53	6,65

Phones 2 and 11 are chosen to take the role of the Smartphone of the follower brand, for the reasons that they are nearly identical with regard to attractiveness and have a large discrepancy between their similarity ratings to the smartphone of the leader brand. With a relative small N, a non-parametric test, more specifically the Mann-Whitney U Test, was chosen to test if the selected smartphones fit the requirements. Phones 2 and 11 did not significantly differ from each other in terms of their visual attractiveness ($p = 0.854$). On the other hand, the two images significantly differ from each other in terms of their similarity with the leader smartphone ($p = 0.001$). Therefore, phone 2 is selected to be the low similarity follower Smartphone and phone 11 is selected to be the high similarity follower Smartphone.

4.3 Main Test

This section will elaborate on the design of the main test in this paper. From the pre-test, a set of three images have been chosen and verified to be consistent with the requirements needed for this study. Using these images, two studies were created; study 1, which has Apple Inc. and

Samsung Electronics being the leader brand and follower brand respectively, and study 2, which has Apple Inc. and Oppo being the leader brand and follower brand respectively.

4.3.1 Study 1: Apple Inc. and Samsung Electronics

In this study, Apple Inc. will take the role of leader brand, while Samsung Electronics takes the role of follower brand. Apple may have been the dominating brand in the smartphone market a few years ago, but Samsung's presence in recent years has made Apple's position less obvious. It may affect participants' decisions, as some may not perceive Samsung as a follower brand in the smartphone market. As a result, findings are possibly not applicable anymore for this research. Therefore, a hypothetical scenario in a form of a story is presented to the participants, wherein Samsung is framed to be the follower brand and responds to the leader Apple. By framing the situation in this manner, participants are expected to be in the correct mindset for this scenario. The different scenarios can be read in Exhibit 6 in the appendix as either Story A or Story B.

Following the story, each participant is randomly assigned to one of two treatments; a low-similarity treatment and a high-similarity treatment. As the name suggests, participants assigned to the low-similarity treatment are presented an image of the hypothetical Apple smartphone accompanied by an image of a hypothetical Samsung smartphone that bears low similarity to the Apple smartphone. Participants assigned to the high similarity case are exposed to the same image of the Apple smartphone, but together with a Samsung smartphone that bears high similarity to the Apple smartphone. In order to avoid any order effects, the order of the phones are randomized, i.e. Apple smartphone on the left and Samsung smartphone on the right and vice versa. To ensure that participants do not confuse the brands of each smartphone, the logo of the brand is shown on top.

Participants continue to fill out a set of questions where they evaluate the appearance of both smartphones. The questions are the same as the ones used in the pre-test. Again, in order to avoid brand confusion, the logo of the brand is shown above the questions. This is followed by a question regarding the similarity between the two smartphones in question, which is once again the same as was used in the pre-test.

Participants' loyalty towards both the brand Apple as well as Samsung are measured in the questions that follow. Using an 11-item scale used by Chaudhuri and Holbrook (2001), loyalty

is measured. The measurement consists of a set of statements, whereby the participant has to indicate to what extend he or she agrees or disagrees with on a 9-point scale:

	Completely disagree							Completely agree	
	-4	-3	-2	-1	0	1	2	3	4
I trust this brand	O	O	O	O	O	O	O	O	O
I rely on this brand	O	O	O	O	O	O	O	O	O
This is an honest brand	O	O	O	O	O	O	O	O	O
This brand is safe	O	O	O	O	O	O	O	O	O
I feel good when I use this brand	O	O	O	O	O	O	O	O	O
This brand makes me happy	O	O	O	O	O	O	O	O	O
This brand gives me pleasure	O	O	O	O	O	O	O	O	O
I will buy this brand the next time I buy a Smartphone	O	O	O	O	O	O	O	O	O
I intend to keep purchasing this brand	O	O	O	O	O	O	O	O	O
I am committed to this brand	O	O	O	O	O	O	O	O	O
I would be willing to pay a higher price for this brand over other brands	O	O	O	O	O	O	O	O	O

In addition, participants are asked if they are familiar with the legal case between Apple Inc. and Samsung Electronics. This is then followed with a statement made by an Apple spokesperson, accusing Samsung of *blatantly copying Apple products*, which the participant has to clarify if he or she agrees or disagrees with. The survey ends with questions regarding their age, gender, brand of smartphone they own and the brand that they desire to own.

4.3.2 Study 2: Apple Inc. and Oppo

Study 2 is almost identical to study 1. In this study, Samsung Electronics is replaced with Oppo, a Chinese mobile device manufacturer. The story that participants read in study 1 has been adjusted to fit the scenario for Oppo (Story B). The images used for Samsung in study 1 have their logos removed, in order for them to represent the Oppo smartphones. However, similar to study 1, loyalty towards Samsung is still measured in this study.

CHAPTER 5: RESULTS AND FINDINGS

5.1 Descriptive Statistics

In total, 564 unique individuals participated across both studies in the main test. 493 surveys were completed, of which 355 were male and 209 were female. The average age of the participants is 30.0 with a standard deviation of 9.02. Not all observations are used in the study, as some observations are deemed to be unreliable. Examples would be completing the survey in an implausibly short amount of time or by answering each question with the same answer across the whole survey. After filtering out the unreliable observations, 307 participants remain.

291 of the participants own a smartphone of some sorts (94.8%), with Samsung being the most popular owned brand, followed by Apple.

However, the figures differ when we observe the desired brand that was indicated by the participant. Here participants were asked which brand of smartphone they desired to have. It is observed that most participants own a Samsung, while Apple is the most desired brand of smartphone. Figure 5-1 indicates the ratio of each owned and desired smartphone brand within this survey sample.

Figure 5-1 Share of Owned and Desired Brands
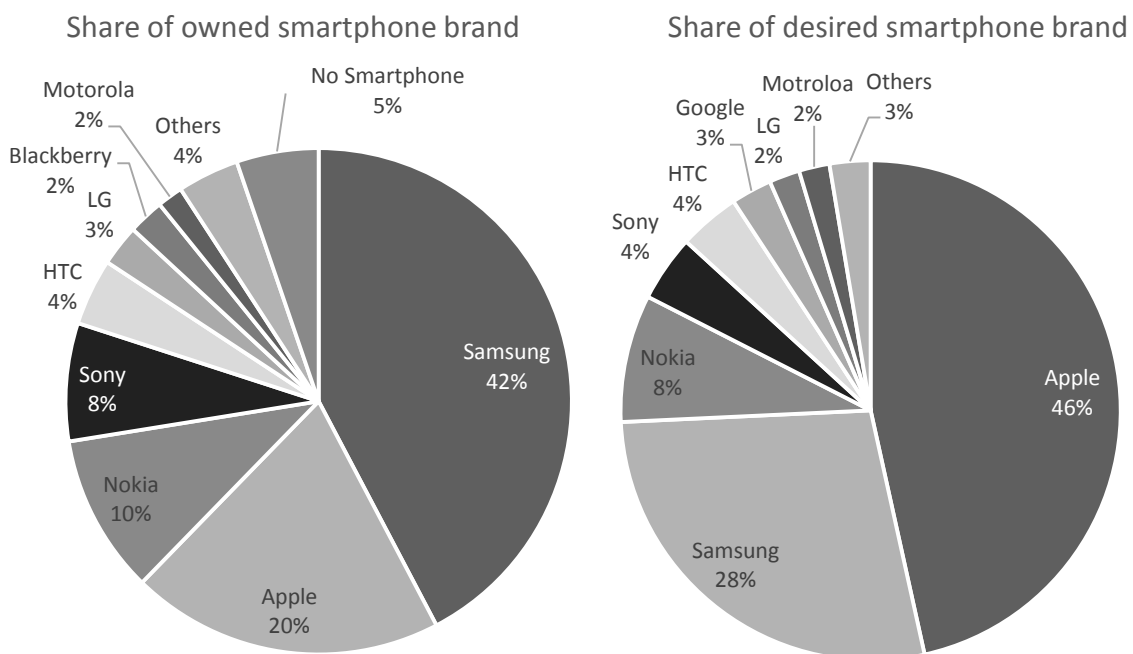
Participants were also asked if they were familiar with the legal case between Apple Inc. and Samsung Electronics and what their opinion is on the case. 48.9% of the participants indicated

that they have heard of the case and are somewhat familiar with it. Of the remaining, 27.4% are familiar with the case and 23.8% are unfamiliar with the legal case. An interesting observation is that there are clear differences between the opinions if one was familiar with the legal case compared to being unfamiliar with it. In the cases where a participant was familiar with the legal case, 44.0% agreed with the notion that Samsung copied products from Apple. In the cases where participants reported that they were somewhat familiar or unfamiliar with the case, only 24.7% and 13.7% respectively agreed with the notion that Samsung copied Apple products.

Of the 307 reliable responses, 147 were assigned to study 1 and 160 were assigned to study 2. Within study 1, 70 were assigned to the low similarity treatment and 77 were assigned to the high similarity treatment. In study 2, it was 75 and 85 respectively. Table 5-1 provides an overview of the descriptive statistics of the main test.

Table 5-1 Overview of Descriptive Statistics

		Study 1		Study 2	
Measurement	**Description**	**Mean**	**Std.**	**Mean**	**Std.**
Treatment	0 = low-similarity, 1 = high similarity	0.52	0.50	0.53	0.50
Follower brand Evaluation	9-point 5-item Scale	7.29	1.86	6.64	1.73
Leader brand Evaluation	9-point 5-item Scale	7.33	1.66	7.57	1.44
Similarity	9-point 1-item Scale	6.26	2.07	6.11	1.99
Samsung Loyalty	9-point 11-item Scale	6.84	1.69	7.03	1.28
Apple Loyalty	9-point 11-item Scale	6.83	1.81	7.26	1.59
Age	Open question	30.8	9.56	30.41	8.83
Gender	0 = male, 1 = female	0.45	0.50	0.44	0.50
Case Familiarity	0,1,2 = unfamiliar, somewhat familiar, familiar	0.93	0.74	1.14	0.68
Case Opinion	0,1,2 = agree, neither agree/disagree, disagree with Apple's statement	0.94	0.63	0.81	0.64

5.2 Reliability

As stated before, not all observations are used in the analysis. It is desired that participants put effort in completing the survey and answer honestly. Otherwise, a large quantity of unreliable observations can skew the results. Therefore, observations have to qualify for 2 requirements, in order for them to be included in the main analysis. Firstly, the time participants took to read the initial story of the survey has to be >5 seconds. Participants were noticeably instructed to read the story carefully before continuing to the main section of the survey. If participants spent less than 5 seconds reading the story, it indicates that the participant in question does not follow the instructions or puts little effort in completing the survey. The second requirement is that participants should have a variation of >0 in their answers. Participants that have no variation in their answers are likely behaving in such manner in order to gain the monetary reward quickly and are unlikely to have any interest in answering honestly.

While the scales used in this study were used by past studies as well, it is still recommended to test if the scales are reliable or not. The most frequent used method for testing the reliability of

scales is Cronbach's alpha. Therefore, this method will be utilized here as well. Two scales were used across the scope of this research; a 5-item product evaluation scale and an 11-item brand loyalty scale. The evaluation scale for both the leader smartphone and the follower smartphone have a Cronbach's Alpha of 0.936. The scale used to measure loyalty for Apple and Samsung have a Cronbach's Alpha of 0.958 and 0.946 respectively. It is generally accepted that an Alpha value of >0.7 is needed to confirm reliability, which therefore means that the scales used in this research are deemed reliable.

5.3 Manipulation Check

For this study, the similarity between the leader smartphone and the follower smartphone were manipulated, as was described previously. Even though the pre-test proved that the two follower smartphone designs have different similarity ratings to the leader smartphone, it needs to be ensured that this manipulation was successfully achieved in the main test as well. Therefore a manipulation check needs to be performed on the given similarity ratings before continuing to the main analysis. Participants in the low-similarity treatment in the main study need to have perceived lower similarity between the two smartphones than participants that were assigned in the high-similarity treatment.

An independent sample t-test was selected to perform the manipulation check. Instead of a standard two-tailed test, a one-tailed test was chosen, as we are only interested in whether the high-similarity smartphone was perceived to be significantly more similar to the leader smartphone, compared to the low-similarity smartphone. Table 5-2 presents the results.

Table 5-2 Results of Manipulation Check

Study	Follower Smartphone	N	Mean	Std. deviation	1-tailed p-value
Study 1	High-similarity	77	6.86	0.191	0.000
	Low-similarity	70	5.60	0.272	
Study 2	High-similarity	85	6.36	0.219	0.044
	Low-similarity	75	5.83	0.224	

Dependent variable: Similarity

The gap between the similarities of the two follower smartphone to the leader smartphone has decreased in the main test compared to the results achieved in the pre-test. However, the high-similarity phone remains significantly more similar to the leader smartphone compared to the low-similarity phone in both studies.

5.4 Hypothesis Testing

The previous sections gave an overall view of the data collected in the studies, demonstrated that reliability has been ensured, and ensured that the requirements of the studies were met through a manipulation check. This section will present and analyze the statistical results for the hypotheses that were presented in chapter 3. The hypotheses were as following:

H1: *Increased brand loyalty has a negative moderating effect on the relationship between objective similarity between two products and perceived similarity by the consumer.*

H2: *Increased brand loyalty towards the leader brand has a negative moderating effect on the effect of product similarity on copycat evaluation.*

H3: *Increase brand loyalty towards the leader brand has a negative direct effect on copycat evaluation.*

H4: *Increased brand loyalty towards the copycat brand has a moderating effect on the effect of product similarity on copycat evaluation.*

H5: *Increase brand loyalty towards the copycat brand has a positive direct effect on copycat evaluation.*

5.4.1 Perceived Similarity

The first hypothesis stated that an individual's loyalty with a brand can affect their cognitive style, which in turn affects their proneness to brand confusion. The dependent variable for this hypothesis is "Perceived Similarity". The main independent variables are the "Treatment" that the participant was in, "Apple Loyalty", "Samsung Loyalty" and two interaction variables between the treatment variables and both loyalty variables. In addition to the main independent variables, variables that may have an effect on an individual's perception, e.g. age, gender, familiarity with the legal case etc. have been added as well.

An OLS regression is implemented to analyze the effect. Table 5-3 column 1s presents the values for the coefficients of the following regression:

$$Similarity = \beta_0 + \beta_1 * Treatment + \beta_2 * SamsungLoyalty + \beta_3 * AppleLoyalty + \beta_4 * (Treatment * SamsungLoyalty + \beta_5 * (Treatment * AppleLoyalty) + \varepsilon$$

Table 5-3 OLS Coefficients of the Effect of Treatment and Loyalty on Perceived Similarity

	Study 1		Study 2	
	(1)	(2)	(1)	(2)
(Constant)	4,614 ***	5,013 ***	5,391 ***	6,03 ***
	(1,363)	(1,203)	(1,917)	(1,345)
Treatment	2,006	1,237 ***	1,772	0,566 *
	(1,985)	(0,348)	(2,217)	(0,317)
SamsungLoyalty	0,142	0,115	0,253	0,293 **
	(0,145)	(0,116)	(0,223)	(0,148)
AppleLoyalty	-0,002	-0,034	0,063	-0,065
	(0,144)	(0,106)	(0,207)	(0,122)
Treatment x SamsungLoyalty	-0,051	-0,051	0,077	0,077
	(0,209)	(0,209)	(0,262)	(0,262)
Treatment x AppleLoyalty	-0,061	-0,061	-0,24	-0,24
	(0,193)	(0,193)	(0,233)	(0,233)
Age	-0,002	-0,002	-0,021	-0,021
	(0,019)	(0,019)	(0,018)	(0,018)
Gender	0,016	0,016	-0,042	-0,042
	(0,353)	(0,353)	(0,333)	(0,333)
CaseFamiliarity	0,103	0,103	-0,461 *	-0,461 *
	(0,244)	(0,244)	(0,248)	(0,248)
CaseOpinion	-0,004	-0,004	-0,294	-0,294
	(0,295)	(0,295)	(0,268)	(0,268)
SamsungOwner	-0,026	-0,026	-0,854 **	-0,854 **
	(0,384)	(0,384)	(0,382)	(0,382)
AppleOwner	0,196	0,196	-0,23	-0,23
	(0,525)	(0,525)	(0,435)	(0,435)

Note: Dependent Variable: Perceived Similarity. Ordinary Least Squares method was used for each column. Column 1 uses unaltered interaction terms. Column 2 uses mean-centered interaction terms. The asterisks indicate significance: *: $p \leq 0.10$, **: $p \leq 0.05$, ***: $p \leq 0.01$

For both studies, the test results of the initial regression did not support the hypothesis. Additionally, none of the other variables shows any significant effect on the dependent variable. Even "Treatment" is insignificant, which is peculiar as this variable indicates wither the participant was shown the low or high similarity follower smartphone (study 1 p=.314, study 2 p=.425). This may be due to multi-collinearity between the "Treatment" variable and the interaction variables, as it is natural to have a high correlation between "Treatment" and an interaction variable that contains "Treatment". If the moderating effect of loyalty on perceived similarity is too small or weak, it may not appear due to multi-collinearity.

Multi-collinearity is a common problem when executing a regression with moderating variables (Cronbach, 1987). A common problem that arises from having multi-collinearity in the test

results is the increased magnitude of the standard error of the independent variables that are subject to the issue (Farrar & Glauber, 1967). As a result, the variables are more likely observed to be insignificantly related to the dependent variable. 'Tolerance' and VIF values are used to examine whether multi-collinearity is present. The Tolerance is an indication of the ratio of variance in the variable that cannot be accounted for by the other variables. Therefore, a small Tolerance indicates that the variable is redundant as it is largely accounted for by the other variables. The Variance Inflation Factor (VIF) is calculated by dividing 1 by the Tolerance. The larger the VIF value, the more likely that the variable is subject to multi-collinearity. As a "rule of thumb", a VIF value of larger than 10 is seen as a likely case of multi-collinearity. Table 5-4 indicates the Tolerance and VIF values of the independent variables used in the initial testing:

Table 5-4 Multi-Collinearity Diagnosis: Tolerance and VIF Values

	Study 1		Study 2	
	Tolerance	VIF	Tolerance	VIF
(Constant)				
Treatment	0,029	34,617 *	0,020	50,535 *
SamsungLoyalty	0,478	2,093	0,298	3,359
AppleLoyalty	0,418	2,395	0,226	4,429
Treatment x SamsungLoyalty	0,049	20,592 *	0,027	37,162 *
Treatment x AppleLoyalty	0,055	18,252 *	0,031	32,587 *
Age	0,884	1,131	0,929	1,076
Gender	0,919	1,088	0,887	1,128
CaseFamiliarity	0,877	1,140	0,866	1,155
CaseOpinion	0,818	1,222	0,838	1,194
SamsungOwner	0,784	1,275	0,684	1,463
AppleOwner	0,708	1,413	0,747	1,338

Note: Dependent Variable: Perceived Similarity. Asterisk indicates a VIF score > 10

The results in table 5-4 confirm that there is a very high likelihood that multi-collinearity is present. As expected, the interaction variables suffered from the statistical issue. Therefore, a second test was run by utilizing mean-centering on the variables that are part of the interaction variable, i.e. "Treatment", "Samsung Loyalty" and "Apple Loyalty". Polynomial terms are created, in which the mean of the variable is subtracted from each value in each variable. The result is that the mean of the polynomial terms become 0. New interaction variables are computed using these newly created terms. These mean-centered interaction variables replace

the interaction terms in the initial test. The results of the second test with mean-centered interaction variables are shown in column 2 of table 5-3. The VIF values of each term in the second test pass the multi-collinearity diagnosis, as none of the VIF values are even valued above 1.5. The recalculated Tolerance and VIF Values are indicated in table 5-5.

**Table 5-5 Multi-Collinearity Diagnosis: Tolerance and VIF Values: Mean Centered**

	Study 1		Study 2	
	Tolerance	VIF	Tolerance	VIF
(Constant)				
Treatment	0.94	1.064	0.964	1.036
SamsungLoyalty	0.745	1.343	0.680	1.471
AppleLoyalty	0.733	1.294	0.650	1.54
Treatment x SamsungLoyalty	0.919	1.089	0.890	1.124
Treatment x AppleLoyalty	0.939	1.065	0.755	1.324
Age	0.884	1.131	0.929	1.076
Gender	0.919	1.088	0.887	1.128
CaseFamiliarity	0.877	1.140	0.866	1.155
CaseOpinion	0.818	1.222	0.838	1.194
SamsungOwner	0.784	1.275	0.684	1.463
AppleOwner	0.708	1.413	0.747	1.338

Note: Dependent Variable: Perceived Similarity. Asterisk indicates a VIF score > 10

While the Treatment variable becomes significant (study 1 p=.001, study 2 p=.077), none of the loyalty variables, with the exception of Samsung Loyalty in study 2 becomes significant in the second test. However, as Samsung was absent and replaced with Oppo in study 2, no support is found for the hypothesis. It should be noted that, next to the significant difference between perceived similarity between the pre-test and the main test, there is a noticeably difference between the behavior of participants in study 1, who saw Samsung competing against Apple, and participants in study 2, who saw Oppo competing against Apple. Even though there were no differences between the studies regarding the images used for the smartphones, the difference in perceived similarity between the low and high similarity case is considerably smaller in study 2 than in study 1 (1.257 mean difference in study 1 compared to 0.538 mean

difference in study 2). An overview of perceived similarities between the studies and treatments is shown in figure 5-1.

Figure 5-1 Mean Perceived Similarity of Different Treatments across Different Studies

Mean Perceived Similarity
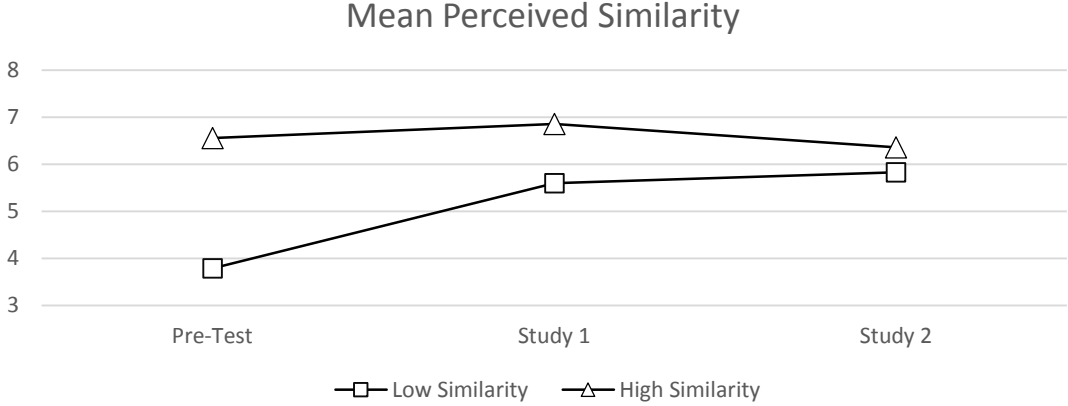
The test results do not support hypothesis 1. Loyalty towards either Apple or Samsung do not have a direct effect, nor do they moderate the perception of similarity between the leader smartphone and follower smartphone. Instead, the perception of similarity is mainly determined by the treatment the participant was in.

5.4.2 Copycat Evaluation

Hypotheses 2 to 5 proposed that loyalty towards Apple, the leader brand, and loyalty towards Samsung, the follower brand, have direct, as well as moderating effects on the evaluation of the follower smartphone, depending on the similarity between the leader smartphone and follower smartphone. Loyalty towards Apple should have a negative direct and moderating effect on the evaluation of the follower smartphone. On the other hand, loyalty towards Samsung should have a positive direct or positive/neutral moderating effect on the evaluation of the follower smartphone. The dependent variable is the evaluation of the follower smartphone "Copycat Evaluation". The main independent variables are once again, "Treatment", "Samsung Loyalty", "Apple Loyalty" and the two interaction variables. Additional control variables are added, e.g. demographic variables, knowledge on the legal case between Apple and Samsung, having a desire to own an Apple or Samsung smartphone etc. Finally, the leader smartphone evaluation is also added as a variable. Some participants may evaluate phones higher on average, independent on the degree of similarity or to who their loyalty is. As this may affect the effect of the independent variables on Copycat Evaluation, Leader Evaluation is added as well to

43

control for this effect. As was discussed in the previous chapter, multi-collinearity between the main independent variables may cause incorrect measurements of the standard error. Once again, mean-centered treatment variables are used for the following tests.

An OLS regression was implemented to analyze the results. In addition, another regression was run with the "Leader Evaluation" as dependent variable. The regressions with the main independent variables and values for the coefficients are as follows with the coefficients being in column 1 of table 5-6 and 5-7:

$$
\begin{aligned}
CopycatEvaluation \\
&= \beta_0 + \beta_1 * Treatment + \beta_2 * SamsungLoyalty + \beta_3 * AppleLoyalty + \beta_4 \\
&\quad * (Treatment * SamsungLoyalty) + \beta_5 * (Treatment * AppleLoyalty) + \varepsilon
\end{aligned}
$$

$$
\begin{aligned}
LeaderEvaluation \\
&= \beta_0 + \beta_1 * Treatment + \beta_2 * SamsungLoyalty + \beta_3 * AppleLoyalty + \beta_4 \\
&\quad * (Treatment * SamsungLoyalty) + \beta_5 * (Treatment * AppleLoyalty) + \varepsilon
\end{aligned}
$$

Figure 5-6 OLS Coefficients of Treatment, Perceived Similarity and Loyalty on Copycat Evaluation

	Study 1			Study 2		
	(1)	(2)	(3)	(1)	(2)	(3)
(Constant)	1.898 *	1.798 *	1.771 *	5.016 ***	3.424 ***	3.907 ***
	(0.983)	(0.939)	(0.969)	(1.236)	(1.281)	(1.288)
SamsungLoyalty	0.573 ***	0.578 ***	0.585 ***	0.247 *	0.16	0.216
	(0.092)	(0.086)	(0.088)	(0.132)	(0.131)	(0.133)
AppleLoyalty	-0.227 **	-0.288 ***	-0.295 ***	-0.098	-0.012	-0.124
	(0.09)	(0.087)	(0.088)	(0.128)	(0.119)	(0.126)
Treatment	0.125		0.179	-0.461 *		-0.512 *
	(0.260)		(0.258)	(0.268)		(0.269)
Treatment x SamsungLoyalty	-0.134		0.156	-0.267		-0.315
	(0.154)		(0.17)	(0.222)		(0.222)
Treatment x AppleLoyalty	0.098		-0.034	0.416 **		0.397 *
	(0.144)		(0.142)	(0.199)		(0.204)
LeaderEvaluation	0.355 ***	0.452 ***	0.449 ***	0.247 **	0.275 ***	0.271 ***
	(0.088)	(0.091)	(0.092)	(0.103)	(0.105)	(0.103)
Age	0.004	0.007	0.009	-0.028 *	-0.022	-0.024
	(0.014)	(0.013)	(0.013)	(0.016)	(0.016)	(0.015)
Gender	-0.114	-0.237	-0.276	-0.124	-0.091	-0.137
	(0.264)	(0.251)	(0.258)	(0.284)	(0.284)	(0.281)
Casefamiliarity	0.138	0.099	0.086	-0.225	-0.213	-0.157
	(0.182)	(0.17)	(0.173)	(0.212)	(0.213)	(0.210)
CaseOpinion	0.176	0.169	0.164	0.225	0.297	0.288
	(0.222)	(0.208)	(0.211)	(0.227)	(0.228)	(0.225)
WantSamsung	0.098	-0.022	-0.041	0.76 *	0.715 *	0.711 *
	(0.346)	(0.33)	(0.333)	(0.419)	(0.417)	(0.414)
WantApple	-0.08	-0.138	-0.15	0.146	0.253	0.313
	(0.336)	(0.319)	(0.321)	(0.343)	(0.347)	(0.344)
SamsungOwner	0.04	0.235	0.279	-0.584 *	-0.467	-0.459
	(0.287)	(0.277)	(0.282)	(0.326)	(0.331)	(0.327)
AppleOwner	-0.083	-0.088	-0.058	-0.118	-0.159	-0.066
	(0.397)	(0.373)	(0.377)	(0.37)	(0.373)	(0.37)
Similarity		-0.028	-0.041		0.122 *	0.156 **
		(0.06)	(0.064)		(0.070)	(0.071)
Similarity x SamsungLoyalty		-0.107 ***	-0.125 ***		0.011	0.015
		(0.033)	(0.039)		(0.058)	(0.058)
Similarity x AppleLoyalty		0.116 ***	0.124 ***		0.077 *	0.056
		(0.04)	(0.042)		(0.041)	(0.042)

*Note: Dependent Variable: Copycat Evaluation. Ordinary Least Squares method was used for each column. The asterisks indicate significance: *: $p \leq 0.10$, **: $p \leq 0.05$, ***: $p \leq 0.01$*

Figure 5-7 OLS Coefficients of Treatment, Perceived Similarity and Loyalty on Leader Evaluation

	Study 1						Study 2					
	(1)		(2)		(3)		(1)		(2)		(3)	
(Constant)	3.129	***	2.298	***	2.254	***	3.411	**	3.6	***	3.598	***
	(0.89)		(0.806)		(0.84)		(0.988)		(0.972)		(1.012)	
SamsungLoyalty	-0.195	**	-0.23	***	-0.23	***	-0.049		-0.031		-0.053	
	(0.096)		(0.085)		(0.087)		(0.106)		(0.102)		(0.107)	
AppleLoyalty	0.395	***	0.439	***	0.422	***	0.427	***	0.414	***	0.431	***
	(0.079)		(0.07)		(0.071)		(0.094)		(0.086)		(0.094)	
Treatment	0.252				-0.041		0.019				0.003	
	(0.242)				(0.288)		(0.213)				(0.216)	
Treatment x SamsungLoyalty	0.079				-0.02		0.083				0.133	
	(0.144)				(0.15)		(0.176)				(0.177)	
Treatment x AppleLoyalty	-0.183				0.043		-0.123				-0.05	
	(0.133)				(0.125)		(0.159)				(0.164)	
CopycatEvaluation	0.309	***	0.346	***	0.348	***	0.153	**	0.165	***	0.171	***
	(0.077)		(0.07)		(0.071)		(0.064)		(0.063)		(0.065)	
Age	0.0		-0.005		-0.005		0.019		0.017		0.017	
	(0.013)		(0.011)		(0.012)		(0.012)		(0.012)		(0.012)	
Gender	0.348		0.552	**	0.57	**	0.148		0.141		0.152	
	(0.245)		(0.215)		(0.222)		(0.224)		(0.22)		(0.223)	
Casefamiliarity	0.107		0.126		0.132		0.027		0.014		0.009	
	(0.17)		(0.149)		(0.152)		(0.168)		(0.166)		(0.167)	
CaseOpinion	0.096		0.026		0.019		-0.18		-0.211		-0.211	
	(0.208)		(0.182)		(0.186)		(0.179)		(0.177)		(0.179)	
WantSamsung	-0.122		-0.126		-0.123		0.034		0.027		0.045	
	(0.323)		(0.289)		(0.293)		(0.334)		(0.327)		(0.333)	
WantApple	0.285		0.178		0.178		-0.176		-0.241		-0.246	
	(0.313)		(0.279)		(0.282)		(0.270)		(0.268)		(0.273)	
SamsungOwner	0.021		-0.316		-0.33		-0.083		-0.121		-0.102	
	(0.268)		(0.242)		(0.248)		(0.26)		(0.258)		(0.262)	
AppleOwner	0.118		0.045		0.043		-0.246		-0.261		-0.256	
	(0.371)		(0.327)		(0.331)		(0.291)		(0.288)		(0.293)	
Similarity			0.151	***	0.155	***			-0.019		-0.022	
			(0.051)		(0.054)				(0.055)		(0.293)	
Similarity x SamsungLoyalty			0.031		0.034				-0.024		-0.029	
			(0.03)		(0.036)				(0.045)		(0.046)	
Similarity x AppleLoyalty			-0.193	***	-0.197	***			-0.069	**	-0.07	**
			(0.032)		(0.034)				(0.032)		(0.033)	

*Note: Dependent Variable: Leader Evaluation. Ordinary Least Squares method was used for each column. The asterisks indicate significance: *: p ≤ 0.10, **: p ≤ 0.05, ***: p ≤ 0.01*

Initial test results are shown in columns 1, whereby the main independent variables were "Treatment", "Samsung Loyalty", "Apple Loyalty" and the interaction variables. The results in study 1 support hypotheses 3 and hypotheses 5, i.e. that loyalty towards the leader brand has a negative direct effect on the evaluation of the follower brand (p=0.013) and that loyalty towards the follower brand has a positive direct effect on the evaluation of the follower brand (p≤0.000). In study 2, the positive effect of loyalty towards Samsung on the follower smartphone is absent, due to the fact that Samsung was not present in this study. Loyalty towards Samsung should not have an effect on the evaluation of Oppo smartphones, which is supported by the results. However, loyalty towards Apple appears to have no effect on the evaluation of the Oppo smartphone either. This is peculiar as Apple is still present in study 2 as the leader smartphone. In addition, the results of the initial test show that neither "Treatment" nor the interaction variables have a significant effect on the evaluation of the follower brand. A possible cause is that participants did not perceive enough difference in similarity between the treatments in the main test. This is supported by the fact that the average difference in similarity between the two treatments has shrunk significantly in the main test, compared to the results found in the pre-test. As the difference in similarity between treatments decreased, effects caused by differences in similarity may be too small to be picked up by the test. In addition, the previous section demonstrated that multi-collinearity was found between the variables "Treatment" and the interaction variables, resulting in a higher standard error of the variables. Therefore, a second test was run. The "Treatment" variable is replaced by "Similarity", which is the perceived similarity between the two phones as indicated by the participants. The indicated perceived similarity by the participants determined to what extend they perceived the follower smartphone as a copycat. As a result, two new interaction variables are created between both "Loyalty variables" and "Similarity". However, as with the interaction terms between "Treatment" and the loyalty variables, it is very likely that multi-collinearity is present when using interaction terms between "Similarity" and the loyalty variables. Therefore, mean-centered interaction terms were used once more. The results are shown in columns 2 of tables 5-6 and 5-7 for both studies. The OLS regressions are then as follows:

$CopycatEvaluation$
$$= \beta_0 + \beta_1 * Similarity + \beta_2 * SamsungLoyalty + \beta_3 * AppleLoyalty + \beta_4$$
$$* (Similarity * SamsungLoyalty) + \beta_5 * (Similarity * AppleLoyalty) + \varepsilon$$

$LeaderEvaluation$
$$= \beta_0 + \beta_1 * Similarity + \beta_2 * SamsungLoyalty + \beta_3 * AppleLoyalty + \beta_4$$
$$* (Similarity * SamsungLoyalty) + \beta_5 * (Similarity * AppleLoyalty) + \varepsilon$$

The results show that the direct effects of brand loyalty remain, though the magnitude is larger. In addition, the newly added interaction variables are significant as well. Though "Similarity" has no direct effect on the evaluation of the follower brand, its effect is moderated by the loyalty of the individual. The interaction variable between "Similarity" and "Samsung Loyalty" has a significant negative effect on the evaluation of the follower brand in study 1 (p=0.002). This is in line with the predictions of H_4. However, on the contrary to H_2, the interaction variable between "Similarity" and "Apple Loyalty" has a significant positive effect on the evaluation of the follower brand. Hence, H_2 is rejected. In order to check the stability of the results, the variables in the first regressions were combined with the variables in the second regression. The result is shown in columns 3 of table 5-6 and 5-7. No major differences occurred, as the standard errors of the variables remained almost unchanged, meaning that the findings are stable. When evaluating the Oppo smartphone in study 2, only a single significant interaction variable was found (Treatment x AppleLoyalty), though only at minor significant level.

To ensure that multi-collinearity was not an issue with the mean-centered interaction terms, another diagnosis was run. As before, a VIF value of larger than 10 would indicate that multi-collinearity is present. Fortunately, the results indicate that mean-centering has been effective, as neither the interaction variables, nor the other variables seem to show signs of multi-collinearity. The VIF values can be seen in table 5-8.

Table 5-8 Multi-Collinearity Diagnosis: Tolerance and VIF Values: Mean Centered

	Study 1		Study 2	
	Tolerance	VIF	Tolerance	VIF
SamsungLoyalty	0,501	1,995	0,569	1,758
AppleLoyalty	0,656	1,525	0,479	2,086
Treatment	0,834	1,199	0,909	1,101
Treatment x SamsungLoyalty	0,674	1,484	0,845	1,183
Treatment x AppleLoyalty	0,85	1,176	0,667	1,5
Leader Evaluation	0,617	1,621	0,834	1,198
Age	0,853	1,172	0,897	1,115
Gender	0,883	1,132	0,862	1,16
CaseFamiliarity	0,857	1,167	0,826	1,21
CaseOpinion	0,783	1,278	0,822	1,216
WantSamsung	0,584	1,711	0,527	1,898
WantApple	0,567	1,764	0,566	1,766
SamsungOwner	0,719	1,392	0,636	1,572
AppleOwner	0,675	1,481	0,721	1,388
Similarity	0,854	1,171	0,824	1,213
Similarity x SamsungLoyalty	0,658	1,519	0,875	1,143
Similarity x AppleLoyalty	0,79	1,265	0,877	1,14

Note: Dependent Variable: Copycat Evaluation. Asterisk indicates a VIF score > 10

5.4.3 Summary of Hypotheses

This section provides a summary of the hypotheses testing. In this research, 5 hypotheses were tested. One of the five is related to what the determinants are of perceived similarity, with the remaining four relating to the evaluation of copycat smartphones. Table 5-9 provides an overview of the results found in the hypotheses testing:

Table 5-9 Summary of Hypotheses Testing

	Hypotheses	Support for Hypotheses
H_1	Increased brand loyalty has a negative moderating effect on the relationship between objective similarity between two products and perceived similarity by the consumer.	No (Neither direct nor moderating effect)
H_2	Increased brand loyalty towards the leader brand has a negative moderating effect on the effect of product similarity on copycat evaluation.	No (Not in the predicted direction)
H_3	Increase brand loyalty towards the leader brand has a negative direct effect copycat evaluation.	Yes
H_4	Increased brand loyalty towards the copycat brand has a moderating effect on the effect of product similarity on copycat evaluation.	Yes (Positive moderating effect)
H_5	Increase brand loyalty towards the copycat brand has a positive direct effect copycat evaluation.	Yes

CHAPTER 6: DISCUSSION

The goal of this study is to examine the role of brand loyalty in the consumer assessment and evaluation of copycat products. While the previous chapter discussed the statistical results of the performed studies, this chapter focuses on the implications of the results. In addition, in the cases where the findings were not in line with expectations, possible explanations are discussed.

6.1 The Perception of Similarity and the Role of Brand Loyalty

This research proposed that the perception of similarity between two objects is not purely dependent on the actual similarity between the two objects; the actual objective similarity between two products is not the same as the similarity perceived by individuals. Instead, the perceived similarity is moderated by external factors that differ from person to person, such as brand loyalty. However, no results were found in this study that support the previously stated notion. The perception of similarity largely dependents on the image that the participant saw, i.e. the objective similarity of two objects.

However, as mentioned before, there is a large difference between the perceived similarity in the pre-test, and the study 1, study 2. A key difference between the pre-test and the main test is the presence of an introductory story at the start of the survey, which frames the phones as a leader and follower smartphone. Questions regarding loyalty were presented after the assessment and evaluation of the smartphones and thus cannot have affected the outcome of perceived similarity. Van Horen and Pieters (2012) noted that the evaluation mode of the consumer (comparative vs. non-comparative) affects the evaluation of the copycat. People who are in a comparative mindset evaluate a copycat more negative than someone in a non-comparative mindset. A story that framed the smartphones may have primed the participants to enter a comparative mindset, resulting in them being more attentive to the images. One of the key differences between the high-similarity smartphone and the low-similarity smartphone is its color; black or white. Color differences can cause participants to initially perceive a large difference in similarity. However, if a person is more attentive, he or she may ignore color as a factor to determine similarity or dissimilarity, as a smartphone may be available in different colors. Therefore, participants in the pre-test observed differences between phones in a more impulsive matter, counting elements such as color has dissimilarity, while participants in the main test ignored these elements, resulting in them perceiving less difference between the leader smartphone and follower smartphone. This suggests that elements such as color are not

necessarily a factor an individual uses to evaluate the similarity between two products. Though suggesting that being more attentive results in perceiving less similarity seems counterintuitive, there may be a logical explanation for this phenomenon. Non-attentive individuals may skim over the products, resulting them observing only superficial elements of similarity that can be recognized in an instant, e.g. color. On the other hand, attentive individuals observe the color difference, but are aware that a smartphone can be fitted with different colors. Therefore, color similarity is not perceived as product similarity by these individuals.

Similarly, previous research has shown that not all types of similarity are rated equally in different mindsets (Miceli & Pieters, 2010). Theme-based imitation is more likely perceived by individuals in a comparative mindset than individuals in non-comparative mindset, who mainly perceive attribute-based imitation. In addition to the findings in the paper of Miceli and Pieters, this study suggests that some types of imitation are more likely to be perceived by non-attentive individuals, while being ignored by attentive people.

In summary, brand loyalty to either the leader brand or follower brand does not affect the consumers' perception of similarity between two products either directly or through a moderating effect. As the findings indicate, the actual design largely decide the similarity between the products.

6.2 Copycat Evaluation and the Role of Brand Loyalty

The main objective of this research was to determine whether Brand Loyalty has any effect on the evaluation of copycat or imitation products. Specifically, brand loyalty towards the leader brand should affect the evaluation of the copycat differently than brand loyalty towards the follower brand. Initially, this study would utilize treatment as the factor that determines whether a participant sees high similarity or low similarity between the leader smartphone and copycat smartphone. However, as was clarified before, the difference in similarity to the leader smartphone between the two follower-smartphones decrease in the main test, compared to the pre-test. As an alternative, the indicated perceived similarity by the participants was used instead of the different treatment levels.

6.2.1 Apple and Samsung

The findings of this study supported some of the made predictions. The Samsung smartphone received on average a better evaluation from individuals that are more loyal towards Samsung. On the other hand, the more loyal individuals are towards Apple, the lower they on average

evaluate the Samsung smartphone. While the direct relationship between brand loyalty and the evaluation of the Samsung smartphone are consistent with the predictions, not all moderating effects were. It was found that loyalty towards Samsung has a negative moderating effect on the evaluation of the Samsung smartphone through perceived similarity. This is in line with expectations. Although a moderating effect from loyalty towards Apple was found, it is in the opposite direction of the predictions; loyalty towards apple has a positive moderating effect on the evaluation of the Samsung smartphone through perceived similarity.

Major findings can be concluded from the found results. Firstly, individuals that show higher loyalty levels to Samsung respond negatively to the follower smartphone, when a smartphone of Samsung shows higher resemblance to a leader smartphone. This supports the notion that brand loyalists desire some 'uniqueness' from their brand of preference (Dick & Basu, 1994). If Samsung would release a new smartphone that has a high resemblance to an established or earlier released smartphone, the 'uniqueness' of the brand dissipates. Secondly, high loyalty levels to Apple leads to a positive response when evaluating the Samsung smartphone that shows higher similarity with the Apple smartphone. This seems to counter previous theories regarding copycat evaluation, i.e. that a copycat are evaluated lower if they show high similarity with a leading brand. A possible explanation is that consumers do not perceive enough similarity yet. Van Horen and Pieters (2012) has shown that the relationship between the degree of similarity and the evaluation of a copycat is not linear. Instead, it follows a quadratic relationship with a concave shape. This holds that a higher similarity will initially result in a better evaluation of the copycat and only when similarity reaches high proportions, consumers will punish the copycat. For smartphones, the point at which higher similarity results in a negative effect may be located at a higher level of similarity than expected. As discussed before, smartphones appearances have converged over the past years. With smartphones generally resembling each other more, consumers may have altered their standards, becoming more tolerate to similarity between smartphones. This therefore results in smartphones requiring to be extremely similar before consumers respond negatively to similarity. It is possible that none of the follower smartphones used in this study show high enough similarity with the leader smartphone to induce a negative response.

6.2.2 Apple and Oppo

In the study whereby Oppo was framed to be the follower smartphone, the findings differed from findings in the first study, whereby Samsung was the follower smartphone. The major

finding in this study is related to the effect of brand loyalty on the evaluation of the Oppo smartphone. On the contrary to the first study, where brand loyalty definitely played a role in the outcome of the copycat evaluation, brand loyalty to either Apple or Samsung seems to not affect the consumers' assessment of the copycat in either a direct or a moderating manner. The evaluation of the Oppo smartphone is mostly determined by the degree of perceived similarity. A higher perceived similarity resulted in a higher evaluation of the Oppo smartphone. This is in line with previous statements regarding the fact that the follower smartphone may be 'moderately' similar to the Apple smartphone, resulting in a better evaluation.

The question why brand loyalty played a role in study 1, but plays no role in study 2 remains. Firstly, the brand Samsung was absent in study 2. As individuals that are loyal towards Samsung do not observe their brand of preference being present, their brand loyalty towards Samsung does not get triggered. Brand loyalty remains dormant if the brand is not present. A second possible cause is that consumers' brand loyalty does not get triggered when one assesses a brand that he or she determined not to be significant. Only if the competing brand's significance reaches a certain threshold, e.g. reaches a certain degree of brand awareness, consumers will respond differently according to their brand loyalty. In the case of Apple and Oppo, most individuals in this test are likely to be unfamiliar with the brand, resulting in loyal individuals not evaluating the Oppo smartphone differently from non-loyal individuals. A dormant brand loyalty clarifies both the absence of a direct effect as well as the moderating effect from brand loyalty towards Apple or Samsung on the evaluation of a non-major brand as Oppo.

However, this does not hold that Oppo copycats were evaluated better than Samsung copycats. On average, the Oppo smartphones were evaluated 0.65 lower compared to the Samsung smartphone. The only implication is that brand loyalty towards either Samsung or Apple will not further decrease the evaluation of the Oppo smartphone.

6.2.3 Summary

In summary, major brands that utilize copycat strategies may make their product more attractive to the consumers that enjoy the leader brand, but may risk alienating their own loyal consumers as they feel that their brand loses its uniqueness. On the other hand, non-major brands avoid repercussions from brand loyalty when adopting copycat strategies and get an increase in their evaluation when their product displays higher degrees of similarity to the leader brand.

6.3 Leader Evaluation and the Role of Brand Loyalty

The evaluation of the leader brand in the presence of copycat behavior was not the focus of this study, though interesting findings were still made in this area. Some results can logically be deducted from the results discussed earlier. Higher brand loyalty towards Apple will result in a higher evaluation of the Apple smartphone, while higher brand loyalty towards Samsung will result in a lower evaluation. The design of the Apple smartphone remained constant throughout this study, meaning that is no factor was expected that would affect the evaluation of the leader smartphone, with exception of differences between individuals, e.g. loyalty levels, demographics etc. However, the findings in this study suggest that the evaluation of the leader smartphone is also affected by the appearance of the follower smartphone that it is compared to.

6.3.1 Apple and Samsung

In study 1, when participants were shown a smartphone that looked highly similar to the Apple smartphone, the Apple smartphone got evaluated better than when a low similarity smartphone was accompanied. This holds that, in addition to copycats being evaluated differently in the presence of a leader brand (Van Horen & Pieters, 2012), the evaluation of the leader brand gets affected by the presence of a copycat as well. A possible reason for this effect could be as follows. A major brand as Samsung is not expected to imitate its competitors according to the minds of the consumers. However, if the unlikely event were to happen, consumers interpret the behavior from Samsung as a kind of confirmation that Apple is truly better, as Samsung would not imitate Apple if they were superior. Therefore, his 'confirmation effect' increases the evaluation of the leader brand, if the copycat behavior is present. The exception is with consumers that are brand loyal to Apple; their opinion of the Apple smartphone seems to deteriorate when it is in the presence a similar copycat. This may be due to the same reason that Samsung loyalists evaluate the Samsung smartphone worse when it is highly similar to the Apple smartphone; the degree of 'uniqueness' disappears. Brand loyal consumers to Apple want their brand of preference to be different, even when it is the competition that makes their products similar.

6.3.2 Apple and Oppo

Distinct differences were found between the responses towards the Apple smartphone in study 1 and study 2. Though the Apple smartphone was evaluated better in the presence of a copycat smartphone from Samsung, this effect is absent if the copycat was from the brand Oppo. This

may be related once more to whether the competing brand is a major or non-major brand and if the follower brand has passed the minimum threshold of brand significance in the consumers' mind. Oppo may be considered to be a non-major brand. Ordinary consumers possibly do not consider non-major brand imitating the leader brand out of the ordinary, resulting in it not affecting the evaluation of the Apple smartphone.

However, loyal Apple consumers are affected by the presence of a copycat, irrespective of whether the copycat is of a major or non-major brand. The 'uniqueness' of their brand of preference still gets deteriorated from another brand's imitative behavior, resulting in them

6.4 Revision Conceptual Model

Earlier in this study, a conceptual model was introduced that summarized the goals of this paper. However, due to unexpected results, objective similarity was not used as an independent variable. Instead, perceived similarity was used, changing the over model. With the change and findings, a new model is conceptualized that provides an overview on the determinants of the Copycat Evaluation:

Figure 6-1 Revised Conceptual Model
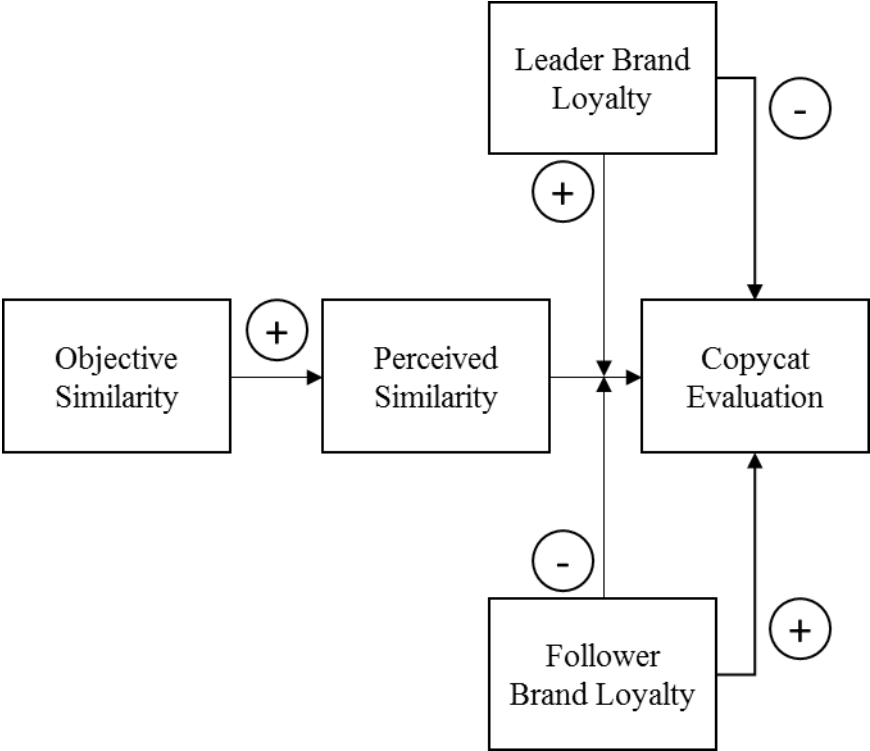
6.5 Managerial Implications

One of the main risks for highly innovative firms is the danger of other firms imitating them. Copycat brands attempt to take unfair advantage of the positive associations that are linked with the leader brand, as copycats can avoid undergoing the long and expensive R&D costs of new products, in addition to creating brand confusion as discussed by Foxman et al (1992). While managers of leading brands are concerned of copycats free-riding on their brand equity, attempting to copy positive associations from a leader brand does not hold that this will succeed in the perception of the consumers. The findings in this research have different implications for different brand managers depending on if their brand is a major or non-major brand. Therefore, this implications are separated in two sections, with each section explaining the situation from the perspective of each respective brand manager.

6.5.1 Major Brands

The findings in this research imply that even though loyal customers assess their brand of preference more positively and competitors more negatively, they are not immune from the actions of copycats. On the contrary, loyal consumers are more sensitive to imitative products from competing major brands and assess the copycat more positively, if it bears a higher similarity. At the same time, loyal consumers to the leader brand will evaluate the leader brand worse if it is being copied, due to the loss of 'uniqueness'. On the positive side, the general evaluation of the leader brand gets improved when a major brand copies them, benefiting the overall assessment of the leader brand. It is difficult to conclude whether the net total effect on the evaluation the leader brand is positive or negative in the presence of a copycat, as there are both losses and gains. A threat arises when a brand that relies on the loyalty of their customer base gets imitated by another major brand, as the loyal customers are the ones most susceptible to copycats. However, if the leader brand does not rely on a loyal customer base, a copycat from another major brand may be beneficial as consumers overall evaluate the leader brand better from the 'confirmation effect'. Another threat would originate from a scenario whereby a non-major brand is the copycat. This copycat will negative affect the evaluation of the leader brand through deteriorating the 'uniqueness' of the leader brand and does not result in a positive 'confirmation effect'.

This research is also useful and informative for brand managers who are considering to adopt copycat strategies. The findings in this paper suggest that major brands can gain favorable responses from customers of the brand they imitate from. However, the gain is not without any

losses; as a major brand, the brand is likely to have a loyal customer base behind it. When imitating another brand, the brand's own customer base may respond negatively to the strategy as they feel alienated or feel that the 'uniqueness' of their brand has disappeared. In order for the company to have a net gain from a copycat strategy, the market needs to perceive the brand as a major brand, while the brand should simultaneously not have a loyal customer base, in order to avoid the negative response from alienating the customer base. If a major brand has a large loyal customer base, it would be best if it were to avoid copycat strategies, so as to avoid repercussions from its own customer base.

6.5.2 Non-Major Brands

This paper did not investigate the consequences on a non-major brand when it is being imitated, as the leader brand was Apple in both studies. Therefore, no conclusions can be made for this scenario. However, the findings do propose certain implications for brand managers of non-major brands that are considering to adopt copycat strategies. Non-major brands avoid certain issues that major brands face when adopting copycat strategies. Firstly, as a non-major brand, brand loyalty towards the leader brand remains dormant, holding that loyalty towards competitors is not a concern. Secondly, assuming that the brand has not build up a loyal customer base yet, alienating the customer base is no concern either. However, a non-major brand still benefits from imitating the leader brand as the evaluation of the non-major brand improves if it bears higher similarity to the leader brand. This holds that adopting a copycat strategy results in a net positive effect on the evaluation from consumers in the case that the follower brand is a non-major brand.

6.5.3 Summary

In summary, this study has indicated that brand managers need to stay alert for imitation and copycat behavior from non-major brands, and major brands in certain situations. Brand loyalty will not protect the leader brand from copycats. Instead, it makes the situation worse in the presence of a copycat. The findings in this paper provides useful insights for companies to further understand the phenomenon of copycats.

6.6 Scientific Implications

This study contributes to the already existing knowledge regarding the evaluation of copycats, but also the implications of brand loyalty. It is already known that the evaluation of imitation brands and products is not as simple as it seems. Next to the mode of the consumers' minds

(Van Horen & Pieters, 2012) or the type of imitation (Miceli & Pieters, 2010), brand loyalty plays an important role as well for consumers when assessing copycats. On the contrary to findings in the past whereby brand loyalty protects a brand from competitive marketing strategies (Dick & Basu, 1994), brand loyalty seems to positively moderate the effect of perceived similarity on the evaluation of the copycat. However, this could be an amplification of the positive effect on the copycat evaluation from being only moderately similar to the leader brand found in earlier research (Van Horen & Pieters, 2012). It is possible that the effect becomes negative when the similarity between the leader brand and copycat increases above a certain threshold, holding that the moderating effect of brand loyalty to the leader brand becomes negative. In order to confirm or reject this notion, additional research could assist in investigating this theory.

Past research has mainly focused on the evaluation of the copycat. The evaluation of the leader brand has mostly been ignored. This research suggests that the evaluation of the leader brand who is being copied may be affected as well when consumers think it is being imitated by another. Being copied by another major brand, e.g. Samsung, improves the evaluation of the leader brand. However, being imitated by an unknown brand as Oppo gives no such effect. This adds a completely new dimension in the field of product and brand copycats. However, this paper did not investigate this effect thoroughly. Therefore, it may be worthwhile for future research to explore how copycats influence the perception and assessment of the brands they attempt to copy.

This study also discovered new findings regarding the workings of brand loyalty. The study suggests that brand loyalty in the mind of the consumer is not always triggered in each scenario. Rather, it depends on the competing brand it is compared to. This study suggests that the competing brand's 'brand significance' needs to reach a certain threshold before the effects of brand loyalty are activated. This holds that brands that are deemed not significant by consumers may avoid the negative effects that arise from competitive brand loyalty, but will also not be able to gain from possible positive effects. However, the findings need further research in order to confirm whether a threshold of some kind truly exists.

Additionally, to the best of the author's knowledge, this is the first research done on the imitation of products, rather than brands, where the products are not counterfeits. When one imagines the imitation of products, it is easy to imagine counterfeit products. However, major brands can show copycat behavior as well by imitating elements of other brands in their own

products. This study provides useful insights on the difference in response from consumers on the imitation of leader brand by other major brands, compared to when non-major brands show copycat behavior. Understanding the motivation of the difference in response from consumers is an area for future research.

6.7 Limitations

A number of limitations were present in this study. Firstly, the focus was purely on the mobile device industry and was limited to smartphones of three brands only (Apple, Samsung and Oppo). Consumers possibly use different criteria when evaluating products from different product groups (Nill & Shultz, 1996). This suggests that the evaluation of copycats can have different standards in different product groups. In addition, the focus of this paper was on the imitation of product characteristics, which holds that the results do not necessarily hold in cases of package design imitation or brand logo imitation. In order to investigate if the findings in this paper are present across multiple product groups and brand characteristics, more research needs to be done with the use of different products.

Secondly, the manipulation of objective similarity could be improved on. Though the manipulation was successful, i.e. the smartphones used in different treatments had a significant difference between their similarities to the leader smartphone, the absolute difference in similarity between the two treatments shrunk severely. This may have caused the high similarity follower smartphone to be only moderately similar to the leader smartphone. To investigate the effects of objective similarity as was stated in the initial model, additional research needs to be done whereby the execution of the similarity manipulation is improved, i.e. where the difference in perceived similarity between the two treatments is higher.

Thirdly, an area that was not examined is the identity of the leader brand and the effects it has on copycat evaluation. In this paper, the leader brand was constant (Apple), while the follower brand varied (Samsung or Oppo). Distinct differences were found in the evaluation of both the leader brand as well as the follower brand, depending on what the identity of the follower brand is. This suggests that different leader brands can invoke different responses from consumers as well, e.g. if Oppo is the leader brand, while Apple imitates features from Oppo. Future research should delve deeper into this area to explore more factors that determine consumers' responses to copycats and the leader brands they copy from.

CHAPTER 7: CONCLUSION

The goal of this study was to investigate whether brand loyalty plays a role in the evaluation of copycats or imitation products. In particular, it applied the research to a hypothetical scenario closely related to the existing case between Apple Inc. and Samsung Electronics. The findings suggest that a loyal customer base does not protect a brand from copycat strategies from the competition in certain situations. The risk is particularly valid in the case where a major brand is the copycat, as customers will evaluate the copycat more positively, if they are more loyal to the leader brand. However, having competition copying the leader brand will improve the overall evaluation of the leader brand, as copycat behavior confirms the superiority of the leader brand. On the other hand, brands that are considering to adopt copycat strategies should also consider different factors. Imitating a leader brand will result in positive responses from loyal customers of the leader brand, but cause a negative response from consumers that are loyal to the copycat brand. Additionally, consumers will overall evaluate the leader brand better, if it is being copied, resulting in a relative worse evaluation for the copycat.

This indicates that in the presence of copycat behavior, the consumers' response to both the leader brand, as well as the copycat brand is not straightforward, as the bipolar direction of the effect of brand loyalty on copycat behavior make the net effect ambiguous. However, it can be concluded that the findings suggest that leader brands with a loyal following are not completely immune from copycats. Simultaneously, leader brands should not always perceive copycats as a negative issue, as it can increase the overall evaluation of the leader brand.

As for the case between Apple Inc. and Samsung Electronics, are Apple's claims valid? Did Apple lose customers from Samsung's alleged copycat behavior? Assuming consumers will more likely choose a smartphone they evaluate better, if consumers perceived the iPhone 3GS and Samsung Galaxy S i9000 as moderately similar, the findings in this study suggest that the consumer evaluation of the Samsung device by Apple loyalists is improved, due to high similarity between the two devices. However, the evaluation of the Samsung device by Samsung loyalists is worsened from the imitation. In addition, the evaluation of the Apple device receives a positive boost from the fact that it is being copied by Samsung. Though, the results may have been different if the actual perceived similarity between the two devices was exceptionally high. As Van Horen and Pieters (2012) mentioned, moderately similar copycats are evaluated positively, while high similarity copycats are punished. It cannot be concluded whether the two devices were only moderately similar or highly similar to each other. However,

even if Apple lost loyal customers to Samsung's imitation, Apple may have gained customers from other smartphone-users, as Samsung confirmed that Apple is the leader brand through its actions. Therefore, even though the claim from the Apple spokesperson that states that Samsung 'blatantly' copied Apple may be true, Apple may have profited from the situation, ending up as the victor rather than the victim.

BIBLIOGRAPHY

Aaker, D. A. (1991). *Managing Brand Equity: Capitalizing on the Value of a Brand Name.* New York: The Free Press.

Aaker, J. L. (1997). Dimensions of Brand Personality. *Journal of Marketing Research*, 347-356.

AFP. (2011, September 9). *Apple wins key German patent case against Samsung.* Retrieved December 24, 2013, from Google: http://www.google.com/hostednews/afp/article/ALeqM5iG-TlwDitKmHb5ViFBjH3-vIOvhw?docId=CNG.202cc68122cca049ccb4313c55f50c81.3d1

BBC. (2012, January 24). *Apple loses appeal over Galaxy Tab 10.1 in Dutch court.* Retrieved December 25, 2013, from BBC: http://www.bbc.co.uk/news/technology-16704461

Bikhchandani, S., Hirshleifer, D., & Welch, I. (1998). Learning from the behavior of others: Conformity, fads and informational cascades. *Journal of Economic Perspectives*, 151-170.

Block, P. H. (1995). Sekking the ideal form: product design and consume response. *Journal of Marketing*, 16-29.

Bloomberg. (2011, April 22). *Samsung Sues Apple on Patent-Infringement Claims as Legal Dispute Deepens.* Retrieved December 24, 2013, from Bloomberg: http://www.bloomberg.com/news/2011-04-22/samsung-sues-apple-on-patent-infringement-claims-as-legal-dispute-deepens.html

Brakus, J. J., Schmitt, B. H., & Zarantonello, L. (2009). Bread Experience: What is it? How is it measured? Does it affect loyalty? *Journal of Marketing*, 52-68.

Brand Keys. (2012). *Brand Keys Customer Loyalty Leaders 2012.* Retrieved February 19, 2013, from Brandkeys.com: http://info.brandkeys.com/acton/ct/943/s-00dc-1210/Bct/l-00a9/l-00a9:25b/ct4_0/1

Brand Keys Inc. (2013). *2013 Brand Keys Customer Loyalty Engagement Index.* Retrieved March 12, 2013, from Brand Keys: http://brandkeys.com/syndicated-studies/customer-loyalty-engagement-index/2013-customer-loyalty-winners/

Brodzinsky, D. M. (1985). On the relationship between cognitive styles and cognitive structures. In E. D. Neimark, R. De Lisi, & J. L. Newman, *Moderators of Competence* (pp. 147-174). Summit, NJ: Lawrence Erlbaum.

Cambel, M. C., & Kirmani, A. (2000). Consumers' use of persuasion knowledge: The effect of accessbility and cognitive capacity on perceptions of an influence agent. *Journal of Consumer Research*, 69-83.

Chattopadhyay, A., & Basu, K. (1990). Humor in Advertising: The Moderating Role of Prior Brand Evaluation. *Journal of Marketing Research*, 466-476.

Chaudhuri, A., & Holbrook, M. B. (2001). The Chain of Effects from Brand Trust and Brand Affect to Brand Performance: The Role of Brand Loyalty. *Journal of Marketing*, 81-93.

Chaudhuri, A., & Holbrook, M. B. (2001). The Chain of Effects from Brand Trust and Brand Affect to Brand Performance: The Role of Brand Loyalty. *Journal of Marketing*, 81-93.

Chen, B. X. (2011, April 19). *Apple to Samsung: Stop stealing ideas*. Retrieved March 12, 2013, from CNN: http://edition.cnn.com/2011/TECH/innovation/04/19/apple.samsung.lawsuit.wired/

Cole, S. (2013, December 12). *Apple's iPhone5s remains 'by far the top selling smartphone'*. Retrieved from AppleInsider: http://appleinsider.com/articles/13/12/12/apples-iphone-5s-remains-by-far-the-top-selling-smartphone

d'Astous, A., & Gargouri, E. (2001). Consumer Evaluation of Brand Imitations. *European Journal of Marketing*, 153-167.

Dick, A., & Basu, K. (1994). Customer Loyalty: Toward an Integrated Conceptual Framework. *Journal of the Academy of Marketing Science*, 99-113.

Estes, Z. (2003). A tale of two similarities: comparison and integration in conceptual combination. *Cognitive Science*, 911-921.

Farago, P. (2012, August 27). *iOS and Android Adoption Explodes Internationally*. Retrieved December 24, 2013, from Flurry: http://blog.flurry.com/bid/88867/iOS-and-Android-Adoption-Explodes-Internationally

Foxman, E. R., Muehling, D. D., & Berger, N. W. (1990). An investigation of factors contributing to consumer brand confusion. *Journal of Consumer Affairs*, 170-189.

Foxman, E., Berger, P., & Cote, J. (1992). Consumer Brand Confusion: A conceptual Framework. *Psychology & Marketing*, 123-141.

Gardner, R. W., Jackson, D. N., & Messick, S. J. (1960). Personality organization in cognitive controls and intellectual abilities. *Psychological Issues*.

Gartner. (2013, August 14). *Gartner Says Smartphone Sales Grew 46.5 Percent in Second Quester of 2013 and Exceeded Feature Phone Sales for First Time*. Retrieved December 24, 2013, from Gartner: http://www.gartner.com/newsroom/id/2573415

Goggin, G. (2009). Adapting the mobile phone: The iPhone and its consumption. *Journal of Media & Curtural Studies*, 231-244.

Interbrand. (2013). *Best Global Brands 2013*.

Iwatani, Y., & Sherr, I. (2011, April 19). *Apple: Samsung Copied Design*. Retrieved March 12, 2013, from The Wall Street Journal: http://online.wsj.com/article/SB10001424052748703916004576271210109389154.html

Jacoby, J. (1977). Information load and decision quality: Some contested issues. *Journal of Marketing Research*, 569-573.

Kalba, K. (2008). *The Global Adoption and Diffusion of Mobile Phones.* Cambridge: Center for Information Policy Research.

Kane, Y. I., & Sherr, I. (2011, April 19). *Apple: Samsung Copied Design*. Retrieved December 24, 2013, from The Wall Street Journal: http://online.wsj.com/news/articles/SB10001424052748703916004576271210109389154

Kapferer, J. N. (1995). Brand Confusion: Empirical Study of a Legal Concept. *Psychology & Marketing*, 551-568.

Kelman, H. C., & Cohler, J. (1975). Reactions to persuasive sommunications as a function of cognitive needs and styles. *30th Annual Meetings of the Eastern Psychological Association.* Atlantic City, NJ.

Lieberman, M. B., & Asaba, S. (2006). Why Do Firms Imitate Each Other? *Avademy of Management Review*, 366-385.

Lieberman, M. B., & Montgomery, D. B. (1988). First-mover advantages. *Strategic Management Journal*, 41-58.

Loken, B., & Ward, J. (1990). Alternative Approaches to Understanding the Determinants of Typicality. *Journal of Consumer Research*, 111-126.

Loken, B., Ross, I., & Hinkle, R. L. (1986). Consumer confusion of origin and brand similarity perceptions. *Journal of Public Policy and Marketing*, 195-211.

Macari, M. (2012, May 9). *Apple and Samsung eyeing July trial in US, trying to steamline case*. Retrieved March 12, 2013, from The Verge: http://www.theverge.com/android/2012/5/9/3007693/apple-samsung-trial-streamline-infringement-claims

Mack, E. (2013, 10 13). *Forbes*. Retrieved 12 23, 2013, from Forbes: http://www.forbes.com/sites/ericmack/2013/10/13/the-first-commercial-cell-call-was-made-30-years-ago-on-a-9000-phone/

Malhotra, N. (1982). Information load and consumer decision making. *Journal of Consumer Research*, 419-430.

Marincola, L. B., & Long, M. G. (1985). Perceptual style and dual-task performance as a function of task difficulty and task emphasis. *Perceptual and Motor Skills*, 1091-1105.

Miceli, G. N., & Pieters, R. (2010). Looking more or less alike: determinants of perceived visual similarity between copycat and leading brands. *Journal of Business Research*, 1121-1128.

Mueller, F. (2012, July 24). *Apple seeks $2.5 billion in damages from Samsung, offers half a cent per standard-essential patent*. Retrieved March 12, 2013, from Foss Patents: http://www.fosspatents.com/2012/07/apple-seeks-25-billion-in-damages-from.html

NRC. (2011, August 24). *Rechtbank Den Haag verbiedt smartphones Samsung - 'Apple delft onderspit'*. Retrieved December 25, 2013, from nrc.nl: http://www.nrc.nl/nieuws/2011/08/24/rechtbank-den-haag-verbiedt-galaxy-s-s-ii-en-ace/

Oliver, R. (1997). *Satisfaction: A Bheavioral Perspective on the Consumer.* Boston: Irwin/McGraw-Hill.

Oliver, R. L. (1999). Whence Consumer Loyalty. *Journal of Marketing*, 33-44.

Reichheld, F. F., Markey, R. G., & Hopton, C. (2000). The loyalty effect- the relationship between loyalty and profits. *European Business Journal*, 134-139.

Schwabish, S. D., & Drury, C. G. (1974). Dimensional commensurability and cue utilization in comparative judgement. *Organizational Behavior and Human Performance*, 172-194.

Scott-Morton, F., & Zettelmeyer, F. (2004). The Strategic Positioning of Store Brands in Retailer-Manufacturer Negotiation. *Review of Industrial Organization*, 161-194.

Smith, A. (2013). *Smartphone Ownership 2013.* Washington D.C.: Pew Research Center.

The Guardian. (2012, October 18). *Samsung Galaxy Tab 'does not copy Apple's iPad designs'*. Retrieved December 25, 2013, from The Gardian: http://www.theguardian.com/technology/2012/oct/18/samsung-galaxy-tab-apple-ipad

The New York Times. (2013, November 21). *Jury Tells Samsung to Pay Apple $290 Million*. Retrieved December 24, 2013, from The New York Times: http://www.nytimes.com/2013/11/22/technology/jury-finds-samsung-owes-290-million-in-apple-patent-trial.html

The New York Times. (2013, August 31). *Tokyo Court Hands Win to Samsung Over Apple*. Retrieved December 24, 2013, from The New York Times: http://www.nytimes.com/2012/09/01/technology/in-japan-a-setback-for-apples-patent-fight.html

The Verge. (2012, August 13). *Apple rests its case after claiming it lost 2 million iPhone and iPad sales due to Samsung*. Retrieved December 26, 2013, from The Verge: http://www.theverge.com/2012/8/13/3239670/apple-rests-case-damages-expert-samsung-trial

Tversky, A. (1977). Features of similarity. *Psychological Review*, 327-352.

UNODC. (2013). *Transnational Organized Crime in East Asia and the Pacific.*

Van Horen, F., & Pieters, R. (2012). Consumer evaluation of copycat brands: The effect of imitation type. *Internal Journal of Research in Marketing*, 246-255.

Van Horen, F., & Pieters, R. (2012). When High-Similarity Copycats Lose and Moderate-Similarity Copycats Gain: The Impact of Comparative Evaluation. *Journal of Marketing Research*, 83-91.

Warlop, L., & Alba, J. (2004). Sincere Flattery: Trade-Dress Imitation and Consumer Choice. *Journal of Consumer Psychology*, 21-26.

Wee, C.-H., Tan, S.-J., & Cheok, K.-H. (1995). Non-price determinants of intention to purcahse counterfeit goods. *International Marketing Review*, 19-46.

Wired. (2013, August 24). *South Korean Court Rules Apple and Samsung Both Owe One Another Damages*. Retrieved December 24, 2013, from Wired: http://www.wired.com/gadgetlab/2012/08/s-korea-court-rules-damages/

WPP. (2013). *BrandZ Top 100 Most Valuable Global Brands 2013.*

Zaichkowsky, J. L., & Simpson, R. N. (1996). The Effect of Experience with a Brand Imitator on the Original Brand. *Marketing Letters*, 31-39.

Zeithaml, V. (1988). Consumer perceptions of price, quality, and value: a means-end model and synthesis of evidence. *Journal of Marketing*, 2-22.

APPENDIX

Exhibit 1

Exhibit 2

Samsung Galaxy S   iPhone 3GS

Exhibit 3 (Miceli & Pieters, 2010).

Leader Snuggle

Attribute-based
copycat "Gently"

Theme-based
copycat "Softy"

Exhibit 4
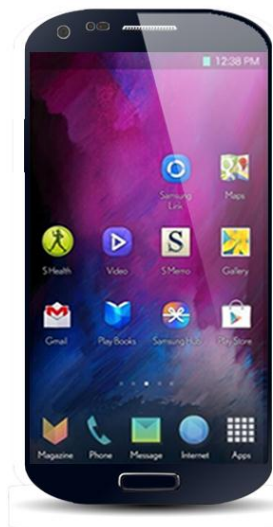
1   2   3   4

5

6

7

8

9

10

11

12

| 13 | 14 | 15 | 16 |

Exhibit 5

Exhibit 6 **Questionnaire Pre-Test**

Introduction - Thank you for taking the time to complete this survey. Your participation is very helpful to me and I appreciate your effort. Your answers will be completely anonymous and used for research purposes only. Please fill out every question honestly and truthfully.

Your task will be to evaluate and assess a randomly selected Smartphone. This survey is split in 2 parts, with each part being explained when you reach it.

GOOD LUCK!

Story - In the next section, you will be shown an image of a Smartphone for 10 seconds. Look at the image carefully. 5 questions will follow regarding your opinion on the appearance and design of the Smartphone that will be shown. There is no time limit on answering the questions.

[1 smartphone image]

What is your opinion on the design and appearance of the Smartphone you just saw? For each of the following rows, select a number that is closest to your opinion.

	-4	-3	-2	-1	0	1	2	3	4	
This design is bad	○	○	○	○	○	○	○	○	○	This design is good
I dislike the design	○	○	○	○	○	○	○	○	○	I like the design
The design is not nice	○	○	○	○	○	○	○	○	○	The design is nice
The design is unattractive	○	○	○	○	○	○	○	○	○	The design is attractive
The design is uninteresting	○	○	○	○	○	○	○	○	○	The design is interesting

Follow Up Text - In the next section, you will once again be shown the image of the previous smartphone. However, this time it will be accompanied by another Smartphone. 1 question will follow regarding your opinion on the similarity between the 2 smartphones. There is no time limit on answering the questions.

[2 Smartphone Images]

How similar did you find the 2 Smartphones look alike in terms of their appearance and design? Select a number that is closest to your opinion.

	-4	-3	-2	-1	0	1	2	3	4	
Completely dissimilar	○	○	○	○	○	○	○	○	○	Completely similar

Exhibit 6 **Questionnaire Main-Test**

Introduction - Hello and welcome to this survey.

Firstly, I want to thank you for participating in this research. Your contribution will help me greatly. In this survey, you will be evaluating a pair of Smartphones on their appearance through a short list of questions, which is spread over several blocks. There is no time limit on any question in this survey, meaning that you can take your time answering each question. However, it should be noted that you cannot return a previous block of questions once you have progressed. It should take no longer than 3 minutes to finish this survey. All information will be anonymous and confidential, and will only be used for this research.

Story A - Please read the following text before continuing to the next block.

 The Situation

The smartphone market is a market that evolves rapidly with new products being introduced at a high pace. In this hypothetical situation, Apple announced a new phone to their popular iPhone product line, a smartphone that will have high-end specifications to satisfy the needs of the consumers. Images began to spread over the world wide web of the design of the newest iPhone.

However, other players in the market did not remain quiet; one of Apple largest competitors, Samsung, followed with an announcement of a new Smartphone to their successful Galaxy S series. It was inevitable for these two smartphones to be compared to one other; consumers began to make side-by-side comparisons of the two devices, with one of the comparisons being the image on the next page.

Story B - Please read the following text before continuing to the next block.

The Situation

The smartphone market is a market that evolves rapidly with new products being introduced at a high pace. In this hypothetical situation, Apple announced a new phone to their popular iPhone product line, a smartphone that will have high-end specifications to satisfy the needs of the consumers. Images began to spread over the world wide web of the design of the newest iPhone.

However, other players in the market did not remain quiet; a relatively new company from China, Oppo, followed with an announcement of a new Smartphone to their smartphone series to compete against Apple. It was inevitable for these two smartphones to be compared to one other; consumers began to make side-by-side comparisons of the two devices, with one of the comparisons being the image on the next page.

[2 Smartphone Images]

Please consider the appearance of the **SAMSUNG smartphone**. What is your opinion on the appearance of the **SAMSUNG** smartphone? For each of the following row, select a number that is closest to your opinion.

	-4	-3	-2	-1	0	1	2	3	4	
The design is bad	○	○	○	○	○	○	○	○	○	The design is good
I dislike the design	○	○	○	○	○	○	○	○	○	I like the design
The design is not nice	○	○	○	○	○	○	○	○	○	The design is nice
The design is unattractive	○	○	○	○	○	○	○	○	○	The design is attractive
The design is uninteresting	○	○	○	○	○	○	○	○	○	The design is interesting

Please consider the appearance of the **APPLE smartphone**. What is your opinion on the appearance of the **APPLE** smartphone? For each of the following rows, select a number that is closest to your opinion.

	-4	-3	-2	-1	0	1	2	3	4	
The design is bad	○	○	○	○	○	○	○	○	○	The design is good
I dislike the design	○	○	○	○	○	○	○	○	○	I like the design
The design is not nice	○	○	○	○	○	○	○	○	○	The design is nice
The design is unattractive	○	○	○	○	○	○	○	○	○	The design is attractive
The design is uninteresting	○	○	○	○	○	○	○	○	○	The design is interesting

The following sets of questions are about your views towards two brands. You will be shown several statements about each brand and will be asked to indicate to what extend you agree with them

The first set of statements are about the brand <u>SAMSUNG</u>. Please indicate the degree you agree with the statements with -4 being completely disagreeing and 4 being completely agreeing.

	Completely disagree					Completely agree			
	-4	-3	-2	-1	0	1	2	3	4
I trust this brand	○	○	○	○	○	○	○	○	○
I rely on this brand	○	○	○	○	○	○	○	○	○
This is an honest brand	○	○	○	○	○	○	○	○	○
This brand is safe	○	○	○	○	○	○	○	○	○
I feel good when I use this brand	○	○	○	○	○	○	○	○	○
This brand makes me happy	○	○	○	○	○	○	○	○	○
This brand gives me pleasure	○	○	○	○	○	○	○	○	○
I will buy this brand the next time I buy a Smartphone	○	○	○	○	○	○	○	○	○
I intend to keep purchasing this brand	○	○	○	○	○	○	○	○	○
I am committed to this brand	○	○	○	○	○	○	○	○	○
I would be willing to pay a higher price for this brand over other brands	○	○	○	○	○	○	○	○	○

The second set of statements are about the brand <u>APPLE</u>. Once more, please indicate the degree you agree with the statements with -4 being completely disagreeing and 4 being completely agreeing.

	Completely disagree					Completely agree			
	-4	-3	-2	-1	0	1	2	3	4
I trust this brand	○	○	○	○	○	○	○	○	○
I rely on this brand	○	○	○	○	○	○	○	○	○
This is an honest brand	○	○	○	○	○	○	○	○	○
This brand is safe	○	○	○	○	○	○	○	○	○
I feel good when I use this brand	○	○	○	○	○	○	○	○	○
This brand makes me happy	○	○	○	○	○	○	○	○	○
This brand gives me pleasure	○	○	○	○	○	○	○	○	○
I will buy this brand the next time I buy a Smartphone	○	○	○	○	○	○	○	○	○
I intend to keep purchasing this brand	○	○	○	○	○	○	○	○	○
I am committed to this brand	○	○	○	○	○	○	○	○	○
I would be willing to pay a higher price for this brand over other brands	○	○	○	○	○	○	○	○	○

What is your age?

Your age: _____

What is your gender?

○ Male
○ Female

Do you own a smartphone? If yes, what is the brand of your smartphone? (if you own multiple smartphones, select the phone that you consider to be your main mobile device)

○ Apple   ○ Nokia

○ Samsung   ○ Motorola

○ LG   ○ Google

○ HTC   ○ Blackberry

○ Sony   ○ Others

○ Huawei   ○ I do not own a smartphone

Do you have any final remarks or comments regarding the design of the survey, the images used in this survey or anything else related to this study?

_____