

# **What is the Effect of the Existence of a Counterfeit on the Genuine Brand?**

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Business

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## **Attestation of Authorship**

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

Name Taghreed Shah-Bahai      Signed       Date 31<sup>st</sup> Jan 2019

## **Dedication**

This work dedication goes to my parents who always pray for me. To my husband and children who cover my life with love. To my supervisor Dr Jungkeun Kim who guide me and give me a lot of his time and effort.

## **Acknowledgement**

I would like to express my sincere gratitude and appreciation to my wonderful expert supervisor Dr Jungkeun Kim, from the Auckland University of Technology, for the dedication and incredible support he has provided me with the outmost professional, immediate, and expert advice throughout this journey. Thank you for sharing your experiences and allowing me to build on your theory model. Thank you for always pushing me to do more, for being so open in answering questions and for advising and caring about my other papers and my future. Your efforts truly mean a lot to me. Working alongside your guidance from the very beginning of this journey, has encouraged and helped me in completing this thesis with great academic standards. I am forever thankful.

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## **Ethics Approval**

This research was approved for three years until 11 June 2021 by Auckland University of Technology Ethics Committee (AUTEC) on June 11<sup>th</sup>, 2018, Ethics application number 18/226.

## **Abstract**

*Background:* In the twenty-first century, counterfeiting has risen an issue in numerous industries for both marketers, (who want to protect their ownership of their intellectual property from counterfeiters and consumer complicity with counterfeit products), and consumers (who involve in deceptive counterfeiting process and faced health, behaviour and emotional risk). The issue faced by both marketers and consumers due to counterfeits has consequences and is of importance to be addressed. By investigating the effects of counterfeits on genuine brands, the present research demonstrates conditions under which counterfeits may positively or negatively influence the image of genuine brands and why this is so.

*Purpose:* The current research aims to fulfil two objectives: First, it aims to provide knowledge in the effects of existing counterfeits on the evaluation of the genuine brand and to discover whether the proposed effect is positive or negative on consumers' choice and attitude toward genuine brands. Second, my research findings are expected to guide marketing managers to decrease consumer demands for counterfeits of their genuine products by showing that the existing counterfeit can improve consumers perceived quality, perceived exclusivity and perceived popularity of the genuine brand.

*Methodology:* This study employed a deductive research approach with a between-subjects design to analyse the data. It also employed a quantitative method to aid in multivariate data analysis. To gather information, experiments were conducted under two studies, and an online-based survey was used through Amazon Mechanical Turk. The sample comprised 412 United States adults who were randomly selected.

*Outcomes and implications:* The research findings support the research hypotheses. Study 1 suggested that existing counterfeits negatively affect the evaluation

of the genuine brand for both men and women. This indicates that respondents didn't purchase the genuine brand and developed negative attitude toward it in the existence of counterfeit brand existing in the market. As in study 1, study 2 also demonstrated that existing counterfeits negatively affect the evaluation of the genuine brand for both known and unknown brands. Moreover, study 2 also showed that the perceived quality, exclusivity and the perceived popularity of the genuine brand mediate the proposed effect of counterfeits on consumers attitudes toward a genuine brand, especially when consumers do not know the genuine brand. However, when consumers are familiar with the genuine brand, an individual's perceived quality and exclusivity played a mediating role in the proposed relationship. The empirical findings in my studies provide a new theoretical understanding of consumer behaviour when a genuine brand has counterfeits in the market. Also, brand awareness has been used to explore the role of the perceived quality, exclusivity and popularity as marketing cues affecting consumer evaluations of the genuine brand when it has existing counterfeits in the market.



## **List of Abbreviations**

ANOVA	Analysis of Variance
$\alpha$	Alpha
$\beta$	Beta
CBP	Counterfeit Branded Product
$F$	F Statistic
$M$	Mean Score
MTurk	Amazon Mechanical Turk
$p$	P-value
SD	Standard Deviation
SE	Standard Error
US	United States
$\chi^2$	Pearson Chi-square Value

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## **Chapter 1: Introduction**

### **1.1 Research Overview**

“If you want to be perceived as someone who knows how to dress well, wear what everyone else is wearing; you can’t go wrong by following current trends in fashion.” (Deval, Mantel, Kardes, & Posavac, 2013)

“You’ll be seen as a fashion maverick if you wear a unique dress and be the envy of everyone at the party.” (Deval, Mantel, Kardes, & Posavac, 2013)

The above contradictory messages show the contradictory choices of consumers in terms of the desirability of dressing and their perception to be perceived favourably through attributes of genuine brand exclusivity or brand popularity. The availability of counterfeit brands and mixed advice received by consumers can confuse individuals regarding their initial intentions to purchase a genuine brand, which also influences their evaluation of the genuine brand. Hence, consumers’ purchase decision making is influenced by genuine brand exclusivity or popularity. In this era, many customers who are influenced by the genuine brand popularity try their best to remain fashionable, regardless of their economic or social standing, which has led to the increase in the demand for counterfeit products in the market (Ergin, 2010). Hence this rise in demand has led to an increasing number of manufacturing products that bear trademarks that are indistinguishable from those of the genuine products—referred to as counterfeit products (Ergin, 2010).

The rise of counterfeit products has created a long-lasting industry on its own, with China being the leading producer of counterfeit goods (Europol, & European Union Intellectual Property Office, 2017). Nowadays, in most product categories the genuine brands are collectively losing approximately US\$461 billion annually, because of counterfeit products. Together with the breach of intellectual property that



constitutes a serious crime and threat globally to the future both in terms of economic and national security, wellbeing and growth objectives (OECD, & EUIPO, 2016).

Regardless of the legal and ethical legislation that affect the users of counterfeit products, there is still an increasing number of people purchasing and demanding counterfeits (Nill & Shultz, 1996). Sellers and buyers knowingly deal with these illegal products without considering their legal and ethical implications, hence the manufacturing of the counterfeit products with the same features and functions continues to satisfy the rising consumer demand (Phau & Teah, 2009). The counterfeit products are often produced to so closely resemble the genuine brand products that in terms of physical appearance the counterfeit products are often mistaken for genuine brand products although most of the time they possess inferior quality (Prendergast, Chuen, & Phau, 2002). For instance, counterfeiting in the business fashion industry still introduces counterfeit products to the market. In the case of handbags, the counterfeit products resemble the genuine Gucci Bags and because of the close resemblance of the two products consumers cannot distinguish correctly between the two (Prendergast et al., 2002) especially since over time the quality of counterfeit products is also improving (Phau & Teah, 2009). The result of this is that some consumers are well aware of the difference but would rather still choose counterfeit products while others are not aware at all (Phau & Teah, 2009).

Many researchers have studied this phenomenon, basing their research topics on the negative implications of the counterfeit goods in the market (Nill & Shultz, 1996; Phau & Teah, 2009; Prendergast et al., 2002). However, less research has been undertaken to explain the positive effects of counterfeit branded products (CBPs) on genuine brands (Qian, 2011; Romani, Gistri, & Pace, 2012). This research investigates

consumers' perceptions of existing counterfeits and their effect (positive versus negative) on genuine brand evaluation.

## **1.2 Research Problem Statement**

Based on numerous studies that have been undertaken pertaining to counterfeit products, many problems and solutions have been identified. In a previous study, Nia and Zaichkowsky (2000) found that people who used counterfeit products were consumers who could not afford the original products. Therefore, this was unlikely to affect the genuine brand revenue. Another study conducted by Kapferer and Bastien (2009) found that there was a need to restrict the distribution of counterfeit products because they caused damage to the reputations and brand image of the genuine brands. In another perspective, Ergin (2010) found that consumers of counterfeits need to be convinced that the benefits of purchasing the genuine brand outweighs the benefit of purchasing its counterfeits although these create the desire in consumers to own popular and available brands associated with attributes and satisfactions of brand popularity and social status. Although most of the literature focuses on the negative impacts of counterfeit products only a few studies examine their benefits. Therefore, this research sheds light on both negative and positive sides of the effect of the existing counterfeit on the genuine brand to have more insight on its effect especially in terms of the positive impact. Understanding the positive outcomes is particularly important because as concluded by previous scholars stopping the production and demand of counterfeit products is especially hard and impossible, hence in both the academic and managerial perspectives the positive impact of counterfeit products' existence in the market should not be avoided any longer. Therefore, this research aims to address this gap and investigate both the negative and positive outcomes of counterfeit products on genuine brand products.

### **1.3 Research Rationale**

The current research is motivated by two research dimensions; in Study 1 the research investigates the consumer decision making choice and attitude of both genders under the conditions that consumers are not aware of the genuine brands quality while the brand name of the genuine products is not revealed to the respondents and an existing counterfeit brand already exists in the market whether it is a new or old product (Mishra, Heide, & Cort, 1998, Anderson & Lindsay, 1998; Kirmani & Rao, 2000; Deval et al., 2013). In Study 2, we further extend this investigation and question whether the consumer's decision-making choice and attitude is the same under the conditions that the brand name of the genuine product is revealed to the respondents and an existing counterfeit product exists in the market. The reason the research is administered by two studies is that investigating the brand awareness attribute of the genuine brand with existing counterfeits in the market is the driving core of this research.

The issue of existing counterfeits has received considerable critical attention. Most of the previous studies reported the negative implications of counterfeit brand products (CBP)s, as counterfeit consumption imposes negative effects on consumers' evaluation of genuine brands (Grossman & Shapiro, 1988; Newton et al., 2006; Eisend & Schuchert-Güler, 2006; Jackson, 2009; Gino et al., 2010; Hieke, 2010; Anthony et al., 2012; Riquelme et al., 2012; Holden & Book, 2012; Nwankwo et al., 2014; Tang et al., 2014; Bian et al., 2016; Pueschel et al., 2017). However, in some instances, CBPs have positive effects on the genuine brands as well. Although some research has been undertaken on the positive effects of existing counterfeits (Qian, 2011; Romani et al., 2012), no controlled studies have been reported. Thus, the available research has failed to identify the positive effects and the cases in which counterfeit products can have

positive implications for genuine brands. Therefore, the aim of the current research was to evaluate instances of CBPs' effect on genuine brands and whether they have positive or negative implications. This research will help the genuine brand market avoid the factors that affect it negatively and redirect the counterfeit market to benefit the genuine brands.

While the majority of research has been undertaken on the counterfeits of known fashion brands (Bhatia, 2018; Kim, Kim, & Marshall, 2016; Nia & Zaichkowsky, 2000; Phau, Sequeira, & Dix, 2009; Phau & Teah, 2009; Wilcox, Kim, et al., 2009), there have been few empirical investigations into unknown fashion brands (Kirmani & Rao, 2000). It is important to examine the existing counterfeits of unknown fashion brands and to discover whether they have similar or different effects on consumer evaluation of the genuine brand. This is because unknown brands are enterprises on their own with economic benefits for the economy whether genuine or counterfeit. The findings of this research will benefit marketers in understanding customers' purchase decision, and that leads to brand awareness and equity in the long term for both unknown and new brands. This thought indicates that a counterfeit brand often promotes subliminal promotion for a genuine brand, hence in Study 1 the concept of an unknown brand was used for comparison for respondents, to remove any bias of a decision based on brand name and awareness which induces respondents' previously held attitudes and emotions about the genuine brand. Thus, this research studied counterfeit consumption in the known and unknown brand context to investigate the role of brand awareness in the evaluation of genuine brands when they have counterfeits in the market.

It is clear that the existing counterfeits have negative impacts on the evaluation of the genuine brand; however, counterfeits can improve the perceived quality, perceived popularity and perceived exclusivity of genuine brands. There has been little

quantitative analysis of such effects on consumers' evaluation of the genuine brand. Most previous research surveyed the effect of counterfeit consumption on purchase intention (Chen, Teng, & Liao, 2018; Leisen & Nill, 2001; Ngo, Northey, Tran, & Septianto, 2018; Nia & Zaichkowsky, 2000; Wang, Stoner, & John, 2018). However, much uncertainty still exists about the role of perceived quality, exclusivity and popularity on the relationship between existing counterfeits and evaluations of the genuine brand. Although a few studies have examined consumers' beliefs regarding quality, exclusivity and popularity, there might exist unpublished studies that researched methods of synthesising the effect and levels among brand awareness with relation to the existing counterfeit signals such as quality that impacts the evaluation of the genuine brand. Therefore, this indicates a need to understand the various perceptions of brand awareness that exist regarding perceived quality, perceived exclusivity and perceived popularity.

#### **1.4 Research Question and Research Objectives**

In general, the purchase of counterfeit products has adverse effects on governments, genuine brands and consumers. Purchasing a counterfeit product reduces the genuine brand's profitability, causes a loss in tax for the government, and affects the image and reputation of the genuine luxury brand (Hieke, 2010; Stewart, Norwinski, & Franze, 2010). However, some experts suggest that brand image and product involvement have no role in explaining the consumer behaviour of purchasing counterfeits, as they do not affect the decisions of a buyer to purchase the product (Bian & Moutinho, 2011). Further, existing studies on counterfeit products have not exhaustively revealed the causes and scope of any positive effects on genuine brands. After all, although counterfeiting has an adverse effect on the genuine brand, it is

arguably profitable for the genuine brand because it could increase the unknown brand's popularity and create a desire to experience the genuine brand quality.

In addition, many consumers who purchase counterfeit products and experience their low quality become aware of the genuine brand's key characteristics, qualities and attributes (Nia & Zaichkowsky, 2000) and that might in turn intrigue their curiosity to experience the genuine brand's product. This indicates that counterfeit products may not always have a negative effect on the genuine brand. Previous research indicated that experiences with counterfeit merchandise were not significantly related to intention to acquire the genuine brand (Yoo & Lee, 2012), yet counterfeits could help improve the brand's market penetration and brand awareness (Qian, 2011). Counterfeit products might provide another layer to the multifaceted nature of a customer's inference process. However, past research has not provided information on the positive effects that counterfeit products may have on genuine brands, and on instances in which counterfeited products may positively affect genuine brands. Thus, this led to the research question:

What is the effect of a counterfeit product on the genuine brand?

To answer the key research question, it was crucial to answer the following questions:

1. Do counterfeit products have a positive (versus negative) effect on genuine brands?

Table 1 below presents a succinct comparison of four previous studies and the current study regarding consumers' perceived quality, exclusivity and popularity cues.

Table 1

*Comparison of Current Study and Previous Studies regarding Perceived Quality, Exclusivity and Popularity Cues*

Researchers	Cues	Mediators	Brand type
Deval et al. (2013)	Popularity versus scarcity cues	N/A	Functional products
Steinhart, Kamins, Mazursky, and Noy (2014)	Popularity versus exclusivity cues	Perceived quality	Generic products Expressive versus functional products
Wu and Lee (2016)	Popularity versus scarcity cues	N/A	Generic products (functional) Self-effect versus other effects (e.g. social) on purchase products
Yu, Hudders, and Cauberghe (2018)	Popularity cues versus no cue	Perceived quality	Fashion products (expressive) Conspicuous versus inconspicuous products
Current study	Existing counterfeit (presence versus absence)	Perceived quality, exclusivity and popularity	Fashion products (known versus unknown genuine brands)

The above table leads to the research gap indicating that thus far, there have been few studies discussing the exclusivity and the popularity of genuine brands when the genuine brand has existing counterfeits in the market. Steinhart et al. (2014) focused on popularity versus exclusivity cues, similar to the study by Deval et al. (2013). Wu and Lee (2016) focused on popularity versus scarcity cues, while Yu et al. (2018) focused only on popularity cues versus no cues. Further, Steinhart et al. (2014) and Yu et al. (2018) investigated the mediators' effect on perceived quality, while Wu and Lee (2016) did not. Therefore, this led to the next research question:

2. Why are consumers' preferences for the genuine brand enhanced when the counterfeit products of the brand are (versus when they are not) available in the market?

The major objective of this study was to investigate the effects of counterfeit products on genuine brands, to provide knowledge of the positive (versus negative)

effects of counterfeit products on genuine brands, and to dispute the claim that counterfeit products only negatively affect genuine brands. This research also examined the mediating role of beliefs regarding perceived quality, perceived exclusivity and perceived popularity cues in the context of brand awareness.

### **1.5 Research Methodology**

The current research employed a philosophically based positivist paradigm and used an exploratory method interpretative in nature, across two studies. These studies had a causal, conclusive, descriptive and cross-sectional experimental design. The methodological approach taken in this study was deductive and quantitative. Data for this study were collected using an online-based survey (Amazon Mechanical Turk) and detailed observation. The sample of the study comprised United States (US) adults ( $n = 412$ ) who were randomly assigned. The data analysis method employed between-subjects design. Variate, bivariate, univariate and multivariate data analysis was undertaken using SPSS software.

### **1.6 Research Results and Findings**

The results of both studies suggest that existing counterfeits affect consumers' evaluation of genuine brands significantly and negatively; that is consumers chose not to purchase the genuine brand that has existing counterfeits in the market regardless of consumers' gender in study 1 and brand awareness in study 2. The findings of study 2 also suggest that perceived quality, perceived exclusivity and perceived popularity mediate the relationship between the existing counterfeit and attitudes toward a genuine brand, especially when consumers are not aware of the genuine brand. Moreover, when consumers are aware of the genuine brand, perceived quality and perceived exclusivity mediate the relationship between the existing counterfeit and attitudes toward the genuine brand, while perceived popularity does not. In the other words, perceived



quality, perceived exclusivity and perceived popularity of the genuine brands can be improved by the existing counterfeits. Thus, these findings indicate that the research findings supported the research hypothesis through the studies reliability and validity tests and answered the research questions.

## **1.7 Research Contributions**

This research investigated the consumer's attitude towards a genuine brand under the condition that a counterfeit brand exists in the market. The findings showed that in such instances the respondents have a negative attitude toward the genuine brand however consumers chose to purchase the genuine brand when no counterfeit exists. This research extends the theoretical knowledge in regard to existing counterfeits significantly and negatively affecting the evaluation of genuine brands by customers. This contributes to marketing managers' knowledge in terms of making their genuine brands easier to distinguish from the counterfeits, since consumers choose not to purchase the genuine brand that has a counterfeit in the market, because consumers have a negative attitude toward a genuine brand that has a counterfeit existing in the market. Marketing managers should also introduce new marketing strategies for the genuine brands which create and induce the consumers' recognition of the exclusivity and popularity of the genuine brand quality for the target market. Consumers also should purchase the genuine brand from the genuine brand's authentic distribution channel or alternatively, make sure other purchases made through different distribution channels such as department stores are based on genuine brands as well. The study aims to enhance our theoretical and managerial understanding of the roles of gender and brand awareness on consumer behaviour with regards to purchasing a genuine brand if it has an existing counterfeit in the market. The empirical findings in the current study also provide a new theoretical understanding of consumer behaviour, as brand awareness has

been used to explore the role of perceived quality, perceived exclusivity and perceived popularity as marketing cues on the relationship between the existing counterfeit and the attitude toward a genuine brand. A result is that managers of new and unknown genuine brands should attract their consumers with the quality and exclusive features of their genuine brands as well as using various marketing tools to make such products more popular and well known. However, managers of known and luxury genuine brands should benefit from their brand's popularity to increase consumers' experience and knowledge regarding the brand's quality and at the same time they should introduce more exclusive features that will attract their consumers and engage more potential consumers, which may increase their sales and revenue.

## 1.8 Thesis Structure

This paper is divided into six chapters. Figure 1 presents an overview of the thesis structure.

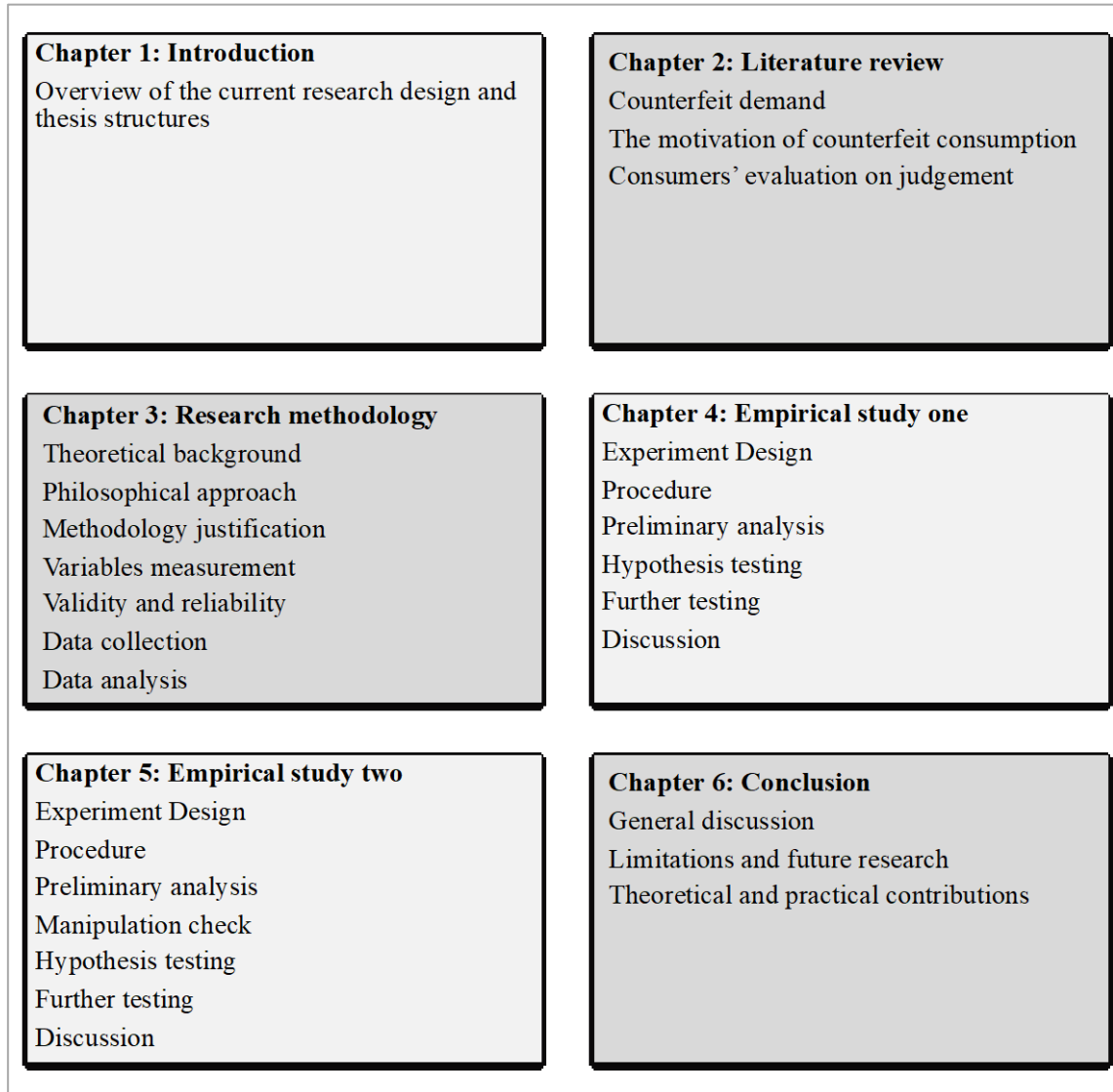


Figure 1. Thesis structure.

As shown in Figure 1, this paper begins with this introductory chapter. It then goes on to review the consumer behaviour and counterfeit consumption literature. The third chapter is concerned with the methodology used for this study. The fourth chapter presents Study 1, while the fifth chapter presents Study 2, with both chapters focusing on the three key themes that explain the experiment design, stimulus material and procedure, results and discussion. The final chapter draws on the entire thesis by tying

up the various theoretical and empirical strands, and includes a discussion of the implications of the findings for future research in this area.

### **1.9 Explaining Research Keywords**

Throughout this paper, the term ‘evaluation of the genuine brand’ refers to consumers’ evaluations of genuine brand quality (Zeithaml, 1988) through their attitude toward a genuine brand and their choice to purchase a genuine brand that collectively contribute as the dependent variables of this study. In this study, consumer attitude is defined as perceiving a genuine brand as good or bad and attractive or unattractive, along with the feeling of favourableness or unfavourableness that consumers have toward a genuine brand. A consumer with a positive attitude is more likely to choose to purchase a genuine brand, and results in the likelihood of liking or disliking the brand. In addition, the term ‘known genuine brand’ refers to consumers being aware of a genuine brand name, while the term ‘unknown genuine brand’ refers to consumers being unaware of the genuine brand name.

Moreover, the term ‘genuine brand quality’ can be defined from the consumer’s perspective as the verifiable superiority of a genuine brand’s predetermined ideal standards, in contrast to the term ‘perceived genuine brand quality’, which refers to the consumer’s judgement of a genuine brand’s overall superiority or excellence (Zeithaml, 1988). In addition, ‘genuine brand popularity’ refers to cues that signal to potential customers that previous individuals have purchased the genuine brand, which provides social validation for the genuine brand (Yu et al., 2018). This differs from the term ‘perceived genuine brand popularity’, which is defined as the amount of consumers who like or enjoy the genuine brand (Park, Lee, & Han, 2007). Further, the term ‘genuine brand exclusivity’ describes certain unique products, such as genuine brands or distribution practices, and differs from the term ‘perceived genuine brand exclusivity’ in

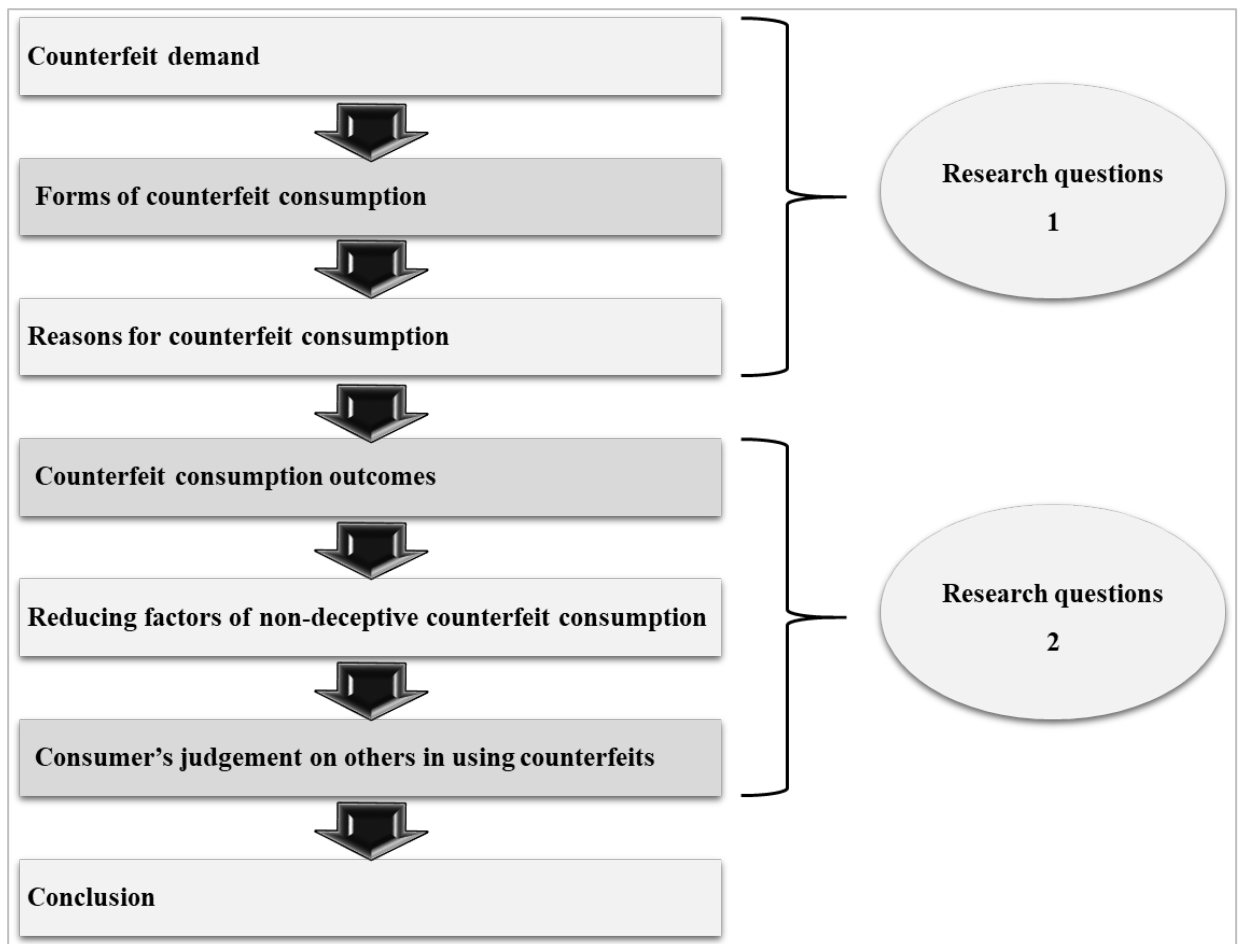
marketing, which is defined as known and unknown genuine brands and is related to scarcity perceived by consumers—whether limited in terms of availability, quantity or distribution (Upshaw, Amyx, & Hardy, 2017). In other words, it includes brand uniqueness, brand scarcity and rarity, brand personality and brand exclusivity for products that are possessed by few consumers.

The term ‘attitude BA’ was developed by the current study to indicate attitude toward genuine brand ‘B’ minus attitude toward genuine brand ‘A’. This term is commonly referred to in order to focus on the effect of counterfeit information on a genuine brand B value in the results tables to make easy data observation throughout the analysis process. This study presents attitudes toward genuine brand B value in the results tables with a positive sign (+), and attitudes toward genuine brand A with a negative sign (–). Further, the term ‘perceived quality BA’ was developed by the current study to indicate the perceived quality of genuine brand B minus the perceived quality of genuine brand A value in the results tables. This term was developed to enable easy data observation of the effect of counterfeit information and brand awareness on a genuine brand throughout the analysis process. It presents the perceived quality of genuine brand B value in the results tables with a positive sign (+) and perceived quality of genuine brand A with a negative sign (–). Likewise, the term ‘perceived exclusivity BA’ is a relatively new term indicating the perceived exclusivity of genuine brand B minus the perceived exclusivity of genuine brand A. Further, the term ‘perceived popularity BA’ is a relatively new term to indicate the perceived popularity of genuine brand B minus the perceived popularity of genuine brand A for the same purpose of perceived quality BA. The next chapter reviews the existing literature on consumer behaviour and counterfeit consumption.

## Chapter 2: Literature Review

### 2.1 Introduction

The purpose of this chapter is to review the literature on counterfeit consumption to inform this research. Based on the behavioural theory of social science, counterfeit activities continue to pose a threat to genuine brands in various marketplaces. This has forced genuine brands to work harder to protect their reputation and hence their market. This chapter contains four critical points: counterfeit demand, the forms of counterfeit consumption, the motivations of counterfeit consumption, and consumers' evaluation on judgement of the brand and other consumers using counterfeits. A visual representation of the literature review is expressed in Figure 2 as below:



*Figure 2.* Visual interpretation of literature review with correspondence to the research questions

## **2.2 Counterfeit Demand**

If a genuine brand attracts consumers based on its quality and function, increasing numbers of consumers purchase the brand, and customers' willingness to pay a premium price for the products grows, which builds strong brand equity (Wagner, Lee, Kleinsasser, & Jamsawang, 2013). When genuine brands become popular in the market, this popularity creates the desire for consumers to experience a popular brand at least once (Luo, et al., 2014). Some consumers can afford to purchase the genuine brand, while others cannot, even though they wish to own the product. Consumers who do not purchase the genuine brand might have economic issues, so they do not have enough funds to purchase the genuine brand. Due to economic concerns some consumers cannot purchase the genuine brand. Other social pressures also create concerns for consumers' as they often compare their standard of living and social styles to others creating further need to appear and live in a certain socially acceptable way (Kapferer & Bastien, 2009; Ngo, et al., 2018). The gap between economic and social pressures has created an opportunity for competitors to produce counterfeit products identical to genuine products at a lower price point satisfying both the affordability and psychological need (Ngo, et al., 2018). This situation makes potential consumers who want to own the genuine brand, but cannot and at the same time attracts competitors who then make a copied version for those who do not purchase the genuine version but are able to own the counterfeit because they are following the herd. For competitors, counterfeiting is the quickest and easiest way to gain high profits and succeed in the market because counterfeiting benefits from the genuine brand's equity and popularity, and, as a result, the counterfeiting issue is established (Bloch, Bush, & Campbell, 1993). This form of counterfeit products that are not misleading consumers (Gino et al., 2010;

Grossman & Shapiro, 1988; Newton et al., 2006) may not present a direct risk to consumers but offers them the chance to experience luxury lifestyle goods. In contrast, there are some counterfeit products that are intended to confuse customers (Eisend & Schuchert-Güler, 2006; McDonald & Roberts, 1994; Tom et al., 1998). Hence, this leads to the need to distinguish between the different forms of counterfeit consumption.

### **2.3 Forms of Counterfeit Consumption**

A number of studies have suggested that counterfeit purchasing decision making involves either a deceptive or non-deceptive process. Deceptive counterfeit consumption occurs when consumers purchase a fake product without knowing that such a product is fake while non-deceptive consumption occurs when consumers buy the counterfeit knowing that they are buying fake products. For instance, when the seller sells a fake COACH fashion bag while the consumer thinks the bag is a genuine COACH, this is deceptive counterfeit consumption. On the other hand, when the seller sells a fake COACH fashion bag and the consumer knows that the bag is a fake COACH, this is non-deceptive counterfeit consumption.

This research focuses on the non-deceptive counterfeit product context because, in such a context, counterfeit markets have found a consumer need, and seek to meet this need (McDonald & Roberts, 1994) by selling counterfeit products (such as fashion products) to satisfy, but not deceive, consumers (Arellano, 1994). This increases the demand for counterfeit products and expands their market. In addition, despite both consumers and sellers being aware that they are involved in an illegal, unethical and immoral situation, the traders still sell the counterfeit products, and the consumers continue their misbehaviour. Table 2 below presents definitions of deceptive and non-deceptive counterfeit situations.



Table 2

*Counterfeit Product Definitions*

Scholars	Counterfeit forms	Counterfeit product definition
Grossman and Shapiro (1988)	Non-deceptive	Counterfeit products are lesser-quality products imitating the genuine brands
Eisend and Schuchert-Güler (2006); McDonald and Roberts (1994); Tom, Garibaldi, Zeng, and Pilcher (1998)	Deceptive	Counterfeit products are copies of the genuine merchandise, intended to deceive consumers
Newton, Green, Fernández, Day, and White (2006)	Non-deceptive	Counterfeit products are dangerous low-quality reproductions of the genuine brand
Gino, Norton, and Ariely (2010)	Non-deceptive	Counterfeit products are imitations of the original brand
Koklic (2011); Wagner et al. (2013)	Non-deceptive	Consumers are aware that they are purchasing a counterfeit version
Stöttinger and Penz (2015)	Non-deceptive	Counterfeit products have several differences from the originals

As indicated in Table 2 above, *non-deceptive* counterfeits are defined as lesser-quality imitations of genuine merchandise that are not deceiving consumers (Gino et al., 2010; Grossman & Shapiro, 1988; Newton et al., 2006), have several differences from the original (Stöttinger & Penz, 2015), and are sold to consumers who are aware that they are purchasing counterfeit goods (Koklic, 2011; Wagner et al., 2013). Based on the above sources, it is clear that some previous researchers did not mention quality and only described counterfeits as imitations (such as Gino et al., 2010). Newton et al. (2006) mentioned that imitations are dangerous, however other researchers did not.

In contrast, *deceptive* counterfeits occur when counterfeiters use a similar product that closely resembles the genuine one, and often stamp it with a trademark that is identical or very similar to the genuine logo, to deceive potential customers (Eisend & Schuchert-Güler, 2006; McDonald & Roberts, 1994; Tom et al., 1998). The classic example of such counterfeiting can be seen in the slight distortion of brand names to confuse customers. For example, to confuse consumers, a counterfeiter may create a

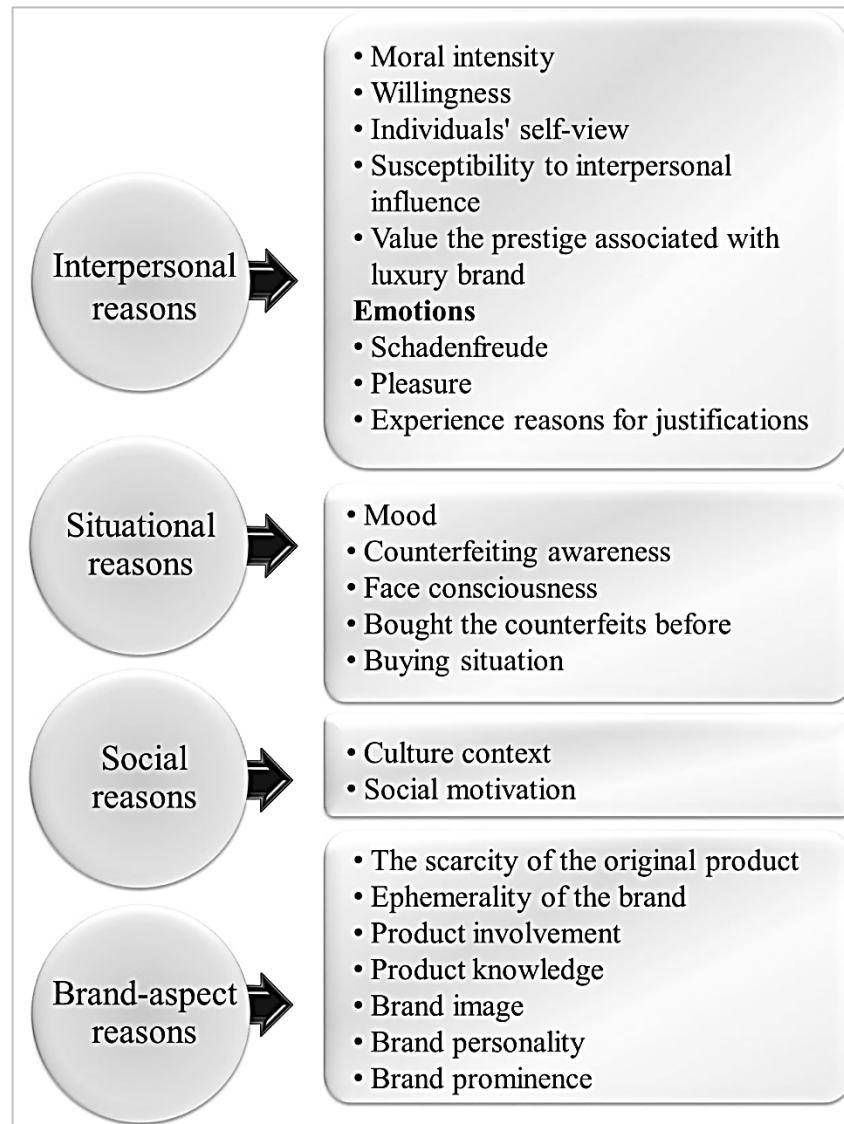
motorbike and name it 'Honga' to sound similar to 'Honda'. All the counterfeiter has done is add the letter 'g', yet this may be enough to confuse consumers, who may only realise that they have made a purchasing mistake when it is too late. Moreover, in this case, consumers do not realise that they are buying counterfeits or are participants in an illegal purchase. When consuming counterfeit foods or medicines this can be dangerous for their health (Chen, Teng, & Liao, 2018). Deceptive counterfeit products not only affect the image of a genuine brand (Hieke, 2010), but also reduce the genuine brand's profitability (Anthony, Craig, & Evalina, 2012). When consumers unknowingly buy counterfeit products, they may conclude that the business did not deliver on its brand promise, and subsequently attach less value to that brand. Customers feel that the company should ensure that there are no counterfeits in the market. If the harm from the use of a counterfeit was foreseeable, and the business played a role in creating the risk of counterfeiting or failed to take reasonable steps to correct it, then it will be held liable under tort law (Tang, Tian, & Zaichkowsky, 2014).

Some counterfeit products are made to be so similar to the genuine product that it is difficult for consumers to tell the difference. These products intend to deceive consumers, whereas the other types of counterfeit products are not deceptive. Some consumers deliberately purchase these non-deceptive counterfeits because they are driven by financial concerns, while others do it to show their 'smarter' behaviour (Tom et al., 1998). This leads to the need to discuss consumers' reasons for purchasing counterfeit products.

## **2.4 Reasons for Counterfeit Consumption**

A large and growing body of literature has investigated the reasons that consumers purchase counterfeit products—as shown in Figure 3—and explain the factors that influence consumers' attitudes toward a counterfeit and their choice to

purchase counterfeit products. This leads to four main themes: interpersonal, situational, social and brand-aspect (see Appendix A).



*Figure 3.* Factors influencing consumers' attitude and choice to purchase counterfeit products.

**2.4.1 Interpersonal and situational reasons.** Personal emotions are one reason that individuals engage in counterfeit consumption because they value the prestige associated with the genuine brand (Grossman & Shapiro, 1988), and so are willing to purchase a counterfeit (Liao & Hsieh, 2013), often with low or no moral scruples (Koklic, Kukar-Kinney, & Vida, 2016; Martinez & Jaeger, 2016; Pueschel, Chamaret, & Parguel, 2017; Wilcox, Kim, et al., 2009) because they can find reasons to justify

their purchase (Eisend & Schuchert-Güler, 2006; Kim et al., 2012). Other research has identified susceptibility to interpersonal influence (Kim, Park, & Kim, 2014) as a possible cause of counterfeit purchases. For situational reasons, the extent to which a consumer has awareness and knowledge of counterfeiting (Baghi, Gabrielli, & Grappi, 2016) is apparently related to their personal experience of purchasing counterfeit goods previously (Ang, Cheng, Lim, & Tambyah, 2001; Ojiaku & Osarenkhoe, 2018; Tom et al., 1998). When interpersonal and situational factors affect consumers' attitudes toward counterfeit products, this creates a conscience issue (Cushman, Young, & Hauser, 2006) because consumers value their social image more than the quality of the products.

**2.4.2 Social reasons.** Social and cultural considerations also play a role in the purchase of counterfeit products (Baek & King, 2015; Stravinskiene, Dovaliene, & Ambrazeviciute, 2013; Teah, Phau, & Huang, 2015). That is, the purchase of counterfeits is perceived differently in different cultural contexts; for example, the intention to purchase a counterfeit product in the UK was influenced by the demographic characteristics of gender and age, but not in China (Bian & Veloutsou, 2007), and generates more or less opprobrium, depending on the social context in which the purchase is made. Also, when consumers engage in counterfeit consumption, they feel *schadenfreude* (Marticotte & Arcand, 2017). —the experience of pleasure gained from acquiring well-established brands at low prices (Hickman & Ward, 2007; Zampetakis, 2014).

**2.4.3 Brand-aspect reasons.** Scarcity (Eisend & Schuchert-Güler, 2006), ephemerality (Janssen, Vanhamme, Lindgreen, & Lefebvre, 2014), brand prominence (Han, Nunes, & Drèze, 2010) and the personality or image of the genuine brand all play a pivotal role in the complex decision that the customer makes (Bian & Moutinho, 2011) to purchase a counterfeit version of a genuine brand when large amounts of

counterfeits exist in the market. The available quantity of the expensive genuine brand is far lower than that of its inexpensive counterfeit, and so many consumers prefer to purchase the genuine version and are willing to pay a premium because they value the quality of the brand.

Thus, interpersonal and situational reasons for counterfeit consumption create a conscience problem. The social aspect related to the popularity of the genuine brand and the brand aspect related to the genuine brand quality and exclusivity are the main factors that explain decisions behind counterfeit consumption; therefore, it is important to consider the effectiveness of counterfeit consumption motivation.

To understand the reasons for purchasing counterfeit products, it is crucial to explore the process of consumer decision making in the counterfeit consumption context, which involves pre-purchase information, purchase action and post-purchase outcomes. Table 3 presents a breakdown of the reasons that create a positive attitude toward a counterfeit product and influence consumers' choice to purchase non-deceptive counterfeit products through the purchasing process: pre-purchase information, purchasing action and post-purchasing outcomes.

Table 3

*Consumers' Decision-making Process for Purchasing Non-deceptive Counterfeit Products*

Researchers	Consumers' decision-making process
Pre-purchase information	
Ajzen and Fishbein (1977)	Attitude influences a consumer's choice to purchase counterfeit products.
Ang et al. (2001); Ojiaku and Osarenkhoe (2018); Tom et al. (1998)	Consumers who have purchased counterfeit products hold attitudes more supportive of counterfeiting than do consumers who have not purchased counterfeit merchandise.
Kirmani and Rao (2000)	Asymmetric information and the unobservable quality of the genuine brand lead consumers to purchase counterfeit products, rather than the genuine brand. Such adverse selection might be solved using signalling. Cues such as warranty, advertising, quality and price could affect consumer choice.
Chakraborty, Allred, Sukhdial, and Bristol (1997)	Using negative cues could reduce the demand for counterfeit products.
Purchasing action	
Tom et al. (1998)	Consumers who purchase counterfeit products and consumers who purchase legitimate goods belong to two different segments, and seek different types of products.
Post-purchase outcomes	
Dick and Basu (1994)	The relationship between relative attitude and repeat purchasing is moderated by situational influence.
Greenberg, Sherman, and Schiffman (1983); Nill and Shultz (1996)	Consumers who knowingly purchase counterfeit products can have the desire to purchase the same counterfeit in the future. Frequently, this demonstrates that the criteria for choice of pirated brands vary by category of product.
Tom et al. (1998)	Consumers who have previous experience acquiring counterfeit products rely on the previous satisfaction to develop a loyal attitude.
Prendergast et al. (2002)	In a counterfeit fashion sense, physical appearance, design and quality are important.

According to Table 3, past counterfeit purchase experience creates a positive attitude toward a counterfeit product (Ang et al., 2001; Tom et al., 1998), which influences consumers' choice to repeat purchase of a counterfeit. Lack of product quality information also leads consumers to purchase a counterfeit product (Kirmani & Rao, 2000). Moreover, the style, physical appearance, design and quality of the counterfeit product are other motivations to purchase a counterfeit (Prendergast et al.,

2002). Consequently, this research aimed to examine consumers' beliefs regarding genuine brand quality, exclusivity and popularity when the consumers were and were not aware of the genuine brand. Given that counterfeit purchases are driven by various factors and motivations, it is important to discuss their consequences.

## **2.5 Counterfeit Consumption Outcomes**

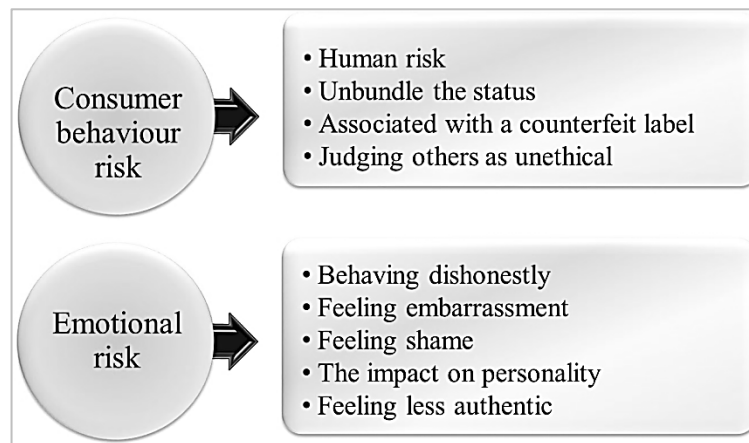
A large and growing body of literature has investigated the consumption of counterfeit products that has an adverse effect on economics, businesses and consumers. Traditionally, it has been argued that such consumption affects the country's trading in general because trading in counterfeit goods is secretive, meaning that its transactions are completed unofficial (Li & Seaton, 2015) and the government cannot collect taxes from the sale of fake products. It has been suggested that if counterfeit products did not exist in the market, then consumers would purchase products from legitimate businesses (Nwankwo et al., 2014).

Not only does counterfeiting affect economics, but it also poses risks to legitimate businesses. When a company's products are counterfeited, the counterfeiter efficiently becomes the legitimate business's competitor. As a result, the actual company loses sales and market share (Chiu, Lee, & Won, 2014). The counterfeiters also benefit because they do not have to pay for any research and development, and enjoy the resources that the legitimate company has invested in brand development. As such, counterfeiters are more harmful to a business than are legitimate competitors.

Further, consumers can suffer from counterfeit risk in terms of their health if they are deceptive when purchasing a counterfeit product. Several studies have revealed that purchasing unsafe counterfeits (such as food and medicine) may result in injuries, illness and even death (Anthony et al., 2012; Jackson, 2009; Newton et al., 2006; Riquelme, Mahdi Sayed Abbas, & Rios, 2012). However, even when counterfeits do not

cause physical harm, consumers suffer financially when they are tricked into spending their money on products with reduced functionality and low quality (Cesareo & Stöttinger, 2015). Moreover, because counterfeiting causes companies to experience losses, they subsequently raise their prices, which means that the consumer ultimately suffers.

Thus, the threat posed by counterfeiters goes far beyond poor product quality and more expensive genuine products. In a non-deceptive counterfeit situation, counterfeit products also pose a significant threat to consumers' emotional perceptions and evaluation of both the counterfeit and genuine brand, as shown in Figure 4.



*Figure 4.* Non-deceptive counterfeit consumption outcomes.

Other studies have considered whether counterfeit consumption affects consumers' emotions. For example, behaving dishonestly (Bian, Wang, Smith, & Yannopoulou, 2016; Eisend & Schuchert-Güler, 2006; Gino et al., 2010; Poeschel et al., 2017), feeling embarrassed (Bian et al., 2016) and feeling shame for purchasing a less authentic product while being judged by others as unethical (Gino et al., 2010) are associated emotional outcomes of purchasing CBPs. Counterfeit consumption also allows consumers to unbundle the counterfeit status and counterfeit quality attributes of



the brand-name products and it makes consumers associate with a counterfeit label rather than the genuine one (Grossman & Shapiro, 1988). However, it has been conclusively shown that counterfeit consumption created moral disgust that manifests in repulsed responses when consumers realised the counterfeit as opposed to the genuine brand (Amar, Ariely, Carmon, & Yang, 2018).

Previous research has indicated that the use of counterfeit versions of genuine brand products causes a negative evaluation of the counterfeit products and a preference for the genuine brands, since it leads to comparative evaluation (Van Horen & Pieters, 2012; Wilcox, Vallen, Block, & Fitzsimons, 2009). Inspecting the counterfeit products among a utilitarian consumption of counterfeits is identified as a major contributing factor leading to changing perceptions of the genuine brand (Amaral & Loken, 2016). Other studies have considered whether the consumer's brand relationship with the genuine item is influenced by counterfeit consumption (Commuri, 2009) (see Appendix B). Overall, the consequences discussed above create the need to reduce or prevent the outcomes of counterfeit consumption.

## **2.6 Factors Reducing Non-Deceptive Counterfeit Consumption**

The elements reducing the consumption of existing counterfeits derive from both business and individual perspectives. It is essential that businesses use a multi-paradigm approach aimed at discouraging counterfeiters, while simultaneously protecting their profits, consumers and legal rights. Numerous studies have attempted to detail methods for reducing counterfeit consumption, and Table 4 presents some examples.

Table 4

*Business Actions to Reduce Non-deceptive Counterfeit Consumption*

Researchers	Business actions to reduce counterfeit consumption
Zhan, Sharma, and Chan (2015)	A business may use many tools, including supply chain management, product identification technology, legal action and working with different interested parties. It is essential that businesses adhere to supply chain best practice, such as the approach created by the US Chamber of Commerce.
Herstein, Drori, Berger, and Barnes (2015)	Controlling waste repositories from entering the distribution chain is essential to ensure that unusable products are destroyed in a way that counterfeiters cannot use.
Bian et al. (2016)	Wholesalers and manufacturers must check the credentials of the companies with whom they choose to work to prevent them from dealing with businesses of questionable character.

Based on Table 4, even if businesses choose to donate inferior or surplus products, they should seek reputable charities to ensure that the goods do not find their way back into the supply chain (Zhan, Sharma, & Chan 2015). Moreover, brand owners should only deal with legitimate retailers and distributors. Similarly, the table shows that counterfeiters can pretend to be legitimate businesses, and purchase products in large quantities with the intention of blending the fake with the real products to confuse customers and maximise their returns. According to the guidelines provided by the US Chamber of Commerce, every business should train its employees to identify questionable companies. Whenever customers place orders that are larger than usual, wish to pay cash for expensive products or demand that products be delivered to questionable destinations, then the business should be apprehensive (Zhan, Sharma, & Chan 2015).

However, the current research focused on the interpersonal factors reducing counterfeit consumption. The interpersonal factors that can reduce counterfeit consumption have been explored by a number of studies, as shown in Figure 5.



*Figure 5.* Interpersonal factors reducing counterfeit consumption.

As shown in Figure 5, previous research has conclusively shown that counterfeit consumption can be reduced by several factors, including cognitive dissonance (Eisend & Schuchert-Güler, 2006; Pueschel et al., 2017), moral beliefs (Kim et al., 2012; Pueschel et al., 2017), self-protection (Baghi et al., 2016), self-view (Kim et al., 2014), face consciousness (Chen, Zhu, Le, & Wu, 2014), honest behaviour (Greene & Paxton, 2009) and increased feelings of guilt (Jeong & Koo, 2015). In addition, the perceived difficulty of choosing from inferior rather than choices referred by their social group is moderated by forms of accountability (Zhang & Mittal, 2005) (see Appendix C). Thus, such factors affect consumers' choices and attitudes, and lead to realisations about how consumers judge and purchase counterfeit products.

## **2.7 Consumers' Evaluation on Judgement of other consumers using counterfeits and of the genuine brand**

Consumers evaluate genuine brands based on judging other consumers using counterfeits and judging the genuine brand itself. This judgment could be in many forms such as moral character, economic or social standing norms.

### **2.7.1 Consumers' judgement of other consumers using**

**counterfeits.** Consumers judge others differently depending on their own intentions to purchase a product. People use different brands depending on their situation (Cushman et al., 2006). Consequently, if people are judged by the counterfeit brands they use, there may be a wrong perception pertaining to their demand patterns. Theorists use different motivational factors to judge people who use counterfeit products (Park & John, 2018). In most cases, consumers purchase products for interpersonal and situational or social reasons. They are also judged in an ethical sense (Gino et al., 2010) as a counterfeit consumption outcome. In various conditions, social groups associate counterfeit products with individuals of low class because the products are perceived to be inexpensive and low quality. This counterfeit association has led to a culture where consumers believe that, to be modern, they have to follow certain trends in the market. Individuals will go to great lengths—including purchasing counterfeit products—to meet existing trends, gain social approval (Brown, 1986) and be more confident in their reference groups. Social image as a justification principle should be equally comparable with the factors used to judge the morality of counterfeit product users, as described in the theories of moral psychology. That is, the theories of moral psychology reveal that some principles can be attested for, whereas others cannot (Cushman et al., 2006). This can be seen in the increased use of counterfeit products, especially by young people, which is described as an immoral act in society. Young people use counterfeit products

with the aim of attaining pride through being fashionable yet end up deviating from the norms and acceptable behaviours of society regarding fashion. As a result, counterfeit products are negatively affecting society by encouraging moral decay, and have led to the establishment of a campaign against counterfeit products (Kim & Johnson, 2014).

**2.7.2 Consumers' judgement of the genuine brand.** Existing research suggests that when customers cannot observe the quality of a brand or product, they use other information to infer quality, such as reference groups or cues, or their available knowledge and individual beliefs. This inferential process is called 'quality signalling' (Akerlof, Spence, & Stiglitz, 2001; Kirmani & Rao, 2000). Stated differently, consumers use cues—such as the cost of advertising (Archibald, Haulman, & Moody Jr, 1983), a high retail price (Caves & Greene, 1996), umbrella branding (Erdem, 1998), a well-known brand name, high brand equity (Erdem & Swait, 1998) or warranties (Boulding & Kirmani, 1993; Kelley, 1988)—as a proxy for quality information. A good example of this can be found in consumers who evaluate a brand with warranties more positively than a brand without warranties because the existence of the warranty itself guarantees the high quality of the brand (Boulding & Kirmani, 1993; Kelley, 1988).

Consumers also use their available knowledge and beliefs to infer unobservable brand quality, which is a concept that can be seen in 'naïve theories' (Anderson & Lindsay, 1998; Deval et al., 2013; Steinhart et al., 2014). A naïve theory that can be attributed to social factors describes the features of a given domain based on the available knowledge and beliefs that do not align with scientific explanations. Naïve theory is relevant to this research because it is based on the common sense that consumers use daily to evaluate products and services. It has been found that, even though consumers have contradictory beliefs about products and services, they use

naïve theory to make a correct choice that satisfies their demands (Kardes, Posavac, & Cronley, 2004).

Thus, individuals are judged regarding the purchase of counterfeit products depending on their own reasons for counterfeit consumption, while the brand is judged depending on information, cues and beliefs—particularly when the quality of the brand cannot be perceived.

## **2.8 Conclusion**

This literature review has suggested that the consumption of existing non-deceptive counterfeit products allows consumers who cannot afford to purchase a genuine brand to experience luxury lifestyle fashion without any direct risk. The need for such consumption by these potential consumers increases the demand for non-deceptive counterfeit products and increases their market value. Interpersonal, situational, social and brand-aspect factors drive this non-deceptive consumption of counterfeit products, create morality issues and explain consumers' motivations for non-deceptive counterfeit consumption. Interpersonal factors affect consumers' choices and attitudes regarding purchasing genuine brands, which results in reducing or preventing non-deceptive counterfeit consumption. Moreover, based on self-interest reasons for non-deceptive counterfeit consumption, consumers are judged regarding the purchase of the products, while the genuine brand is judged based on naïve beliefs about information and relevant cues, especially when the quality of the genuine brand cannot be perceived. Consequently, based on this literature review, this research suggests that the existence of counterfeits of a genuine brand represents a comparable role to a quality cue among naïve theories of societies. The following chapter will discuss this study's research methodology.

## **Chapter 3: Research Methodology**

### **3.1 Introduction**

The previous chapter presented a literature review on the non-deceptive counterfeit consumption literature, while this chapter describes and discusses the methods used in this investigation. Given that this research aimed to investigate the relationship between variables, it employed a quantitative approach and experimental design (Bryman & Bell, 2015) in a couple of studies, rather than using a qualitative method for hypothesis-testing purposes.

The sections of this chapter include first, the discussion of the theoretical background and hypothesis development to provide a brief background of the current research theories and existing literature that informed and motivated this research. Second, the following sections move on to describe in greater detail the research's philosophical approach, justification of the research methodology, ethical considerations, measurement of the research variables, validity and reliability, data collection and data analysis. Finally, the chapter concludes by discussing the limitations of the research methodology.

### **3.2 Theoretical Background and Hypothesis Development**

Evaluation of the positive and negative aspects of counterfeiting depends on the particular product category (Eisend & Schuchert-Güler, 2006). This study expected that exposure to information about an existing counterfeit in the market might positively or negatively affect the decision to purchase the genuine brand, and influence attitudes toward the genuine brand. This study expected that information about an existing counterfeit in the market would positively affect consumer choice to purchase the genuine brand and consumer attitude toward the genuine brand, for four reasons. Initially, most scholars focused on the downside of the counterfeit on the genuine brand,

however, there are few studies examine the benefit of the existing counterfeit on the genuine brand. Also, the existing counterfeits activate knowledge structures that make relevant counterfeit information highly accessible, thereby guiding subsequent processing and behaviour (Qian, 2011; Romani et al., 2012). Moreover, the counterfeits can help improve the brand's market penetration and brand awareness (Qian, 2011). Furthermore, from brand perspective, when the consumer makes adverse selection and purchase the counterfeit of the genuine brand because the asymmetric information on the genuine brand and (or) unobservable quality of the genuine brand, so the genuine brand provides a signal quality to reveal the quality of the genuine brand (Kirmani & Rao, 2000). Therefore, the consumer purchase intention will increase to the genuine brand through such signalling theory. Similarly, the counterfeit cues can act as quality signalling (Kirmani & Rao, 2000) or prompts for consumers to engage in purchasing a genuine brand.

Therefore, the current research drew from signalling theory (Spence, 1974; M. Spence, 2002) to suggest that the existence of counterfeits of a genuine brand might serve better signal quality (versus inferior) and allay information asymmetry in the evaluation of a genuine brand's quality (Akerlof et al., 2001; Kirmani & Rao, 2000). Based on this information, this study developed the following hypothesis:

***Hypothesis 1a:*** *The existence of a counterfeit brand positively affects the evaluation of the genuine brand.*

In addition, this study also expected information about existing counterfeits in the market to negatively affect consumer choice to purchase the genuine brand and consumer attitudes toward the genuine brand for three reasons. The first reason is that consumer behavioural risks that consumers suffer from purchasing counterfeits in terms of their health (Anthony et al., 2012; Jackson, 2009; Newton et al., 2006; Riquelme et



al., 2012), unbundling the status and quality attributes of the brand-name products (Cesareo & Stöttinger, 2015), and makes consumers associated with a counterfeit label (Grossman & Shapiro, 1988) and judging others as unethical (Gino et al., 2010).

Another reason is that consumers suffer from emotional risk that they are behaving dishonestly (Bian et al., 2016; Eisend & Schuchert-Güler, 2006; Gino et al., 2010; Pueschel et al., 2017), feeling embarrassment (Bian et al., 2016) and feeling shame and less authentic (Gino et al., 2010), and this affects their personality (Holden & Book, 2012; Pueschel et al., 2017). Further one is that customers have negative past experiences of purchasing a counterfeit products (i.e., low quality), which discourages them from purchasing a genuine brand that has a counterfeit existing in the market because they are concerned that the genuine product they will purchase might be a counterfeit, not the original, given that customers' past experience relates significantly and negatively to brand choice (Ang et al., 2001; Ojiaku & Osarenkhoe, 2018; Tom et al., 1998).

The above discussion led to the following hypothesis:

***Hypothesis 1b:*** *The existence of a counterfeit brand negatively affects the evaluation of the genuine brand.*

Evaluation of the genuine brand included two dependent variables: attitude toward a genuine brand and choice to purchase a genuine brand. Figure 6 below illustrates the Hypothesis 1 conceptual framework.



*Figure 6.* Hypothesis 1 conceptual framework.

As indicated in Figure 6, it was expected that the information of an existence of a counterfeit product of a genuine brand (‘counterfeit signalling’) would have a significant effect on consumers’ choice to purchase the genuine brand and consumers’ attitude toward the genuine brand.

The literature review also explained consumer beliefs as naïve theories, in which the evaluation of genuine products is based on common-sense explanations, since consumers judge a brand based on their knowledge, beliefs or relevant cues. Different authors have measured the naïve concept in a variety of ways. For instance, research presents evidence that consumers believe that the concept of ‘unhealthy’ actually means ‘tasty’ operates at an implicit level (Raghunathan, Naylor, & Hoyer, 2006) and, if humans believe that emotion is fleeting, a positive versus negative mood increases the direct effect on the norm (Labroo & Mukhopadhyay, 2009). Correspondingly, Yorkston, Nunes, and Matta (2010) found that traits which are malleably believed are more accepting of brand extensions than if they are fixedly believed. Nevertheless, beliefs regarding cost and merchandise popularity versus exclusivity drive product evaluation (Deval et al., 2013). Thus, naïve theories can explain consumers’ evaluation regarding purchasing a genuine brand, particularly if those consumers cannot observe its quality.

Table 5 below presents a sample of quality, exclusivity and popularity cues testing in a number of empirical studies.

Table 5

*Sample of Empirical Quality, Exclusivity and Popularity Cues Research*

Scholars	Types of quality cues	Findings	Naïve theory
Caves and Greene (1996)	High retail price	Price is a cue of quality for convenience products	No
Kelley (1988)	Warranty	Warranty is positively correlated with quality	No
Erdem and Swait (1998)	Well-known brand name	The brand name is positively related to the credibility—that is, the cue is positively related to perceived quality	No
Archibald et al. (1983)	Cost of advertising	After quality ratings are published, advertising cues an improved purchase	No
Erdem (1998)	Umbrella branding	Umbrella brand extensions are expected to be a cue of the parent brand	No
Becker (1991)	Brand exclusivity	The brands or services that are not available to every person are cues of brand quality	No
Berger and Heath (2007)		Uniqueness is a cue in a product area that is visible as symbolic of identity	No
Steinhart et al. (2014)		Perceived uniqueness is a positive cue to self-expressive products' quality	Yes
Hellofs and Jacobson (1999)	Brand popularity	Popularity cue is associated with perceived quality	No
Berger and Heath (2007, 2008)		Popularity cue reflects brand quality	No
Deval et al. (2013)		The information that the product is widely available serves as a cue of its popularity	Yes
Steinhart et al. (2014)		Perceived uniqueness is a positive cue to functional products	Yes
Myers and Sar (2013)		The effects of popularity approval cues occur only for high self-monitors	No
Song (2015)	Popularity versus uniqueness advertising cues	Uniqueness advertising cues are prevention-focused that elicit more positive attitudes while popularity advertising cues are promotion-focused and elicit positive attitudes	No
Wu and Lee (2016)	Popularity versus scarcity cues	Scarcity cues are more effective than popularity cues when purchasing for self	No

Table 5 indicates that some authors have focused on naïve theories concerning quality, exclusivity and popularity as beliefs (Deval et al., 2013; Steinhart et al., 2014), whereas others have highlighted the relevance of quality, exclusivity and popularity as cues and signalling (Archibald et al., 1983; Becker, 1991; Berger & Heath, 2007, 2008; Caves & Greene, 1996; Erdem, 1998; Erdem & Swait, 1998; Kelley, 1988). Therefore, this indicates a need to understand the various perceptions of consumers' beliefs regarding the genuine brand evaluation that exists among naïve theories of societies.

Naïve theories of societies have two forms: naïve theory of exclusivity and naïve theory of popularity. Given that consumers' desires and evaluations of products vary, naïve theories permanently conflict. Naïve theories of societies are used to predict the future or explain certain occurrences (Steinhart et al., 2014) when scientific theories cannot explain them. In relation to the naïve theories of exclusivity and popularity, it is evident that the existence of counterfeit products in the market is likely to affect consumers' evaluation of genuine brands. In the naïve theory of exclusivity, genuine products are always more expensive than counterfeit products, thus, only a few people will buy them. Counterfeit products are usually inexpensive, and many consumers can afford to purchase them (Berger & Heath, 2007, 2008). Therefore, consumers who seek unique and scarce products that are possessed by few individuals will choose to purchase genuine brands because of their high quality (Berger & Heath, 2007, 2008). In contrast, in the naïve theory of popularity, consumers will desire to own products that dominate the market (Hellefs and Jacobson, 1999; Berger & Heath, 2007, 2008). Although some people will purchase counterfeit products knowingly because they are affordable, most consumers are very sensitive to quality issues. In this case, people who use counterfeit products will desire to obtain genuine brands because of their quality (Berger & Heath, 2007).

The naïve theory of exclusivity also explains the situation in which customers desire products that are unique and of high quality (Berger & Heath, 2007). The naïve theory of exclusivity is applied where the choice of product reflects the consumer's tastes and preferences. Some consumers demand scarce, rare and unique products because they believe that this makes them perceived uniquely different from others, therefore, they value the brand quality for its exclusivity. Products that are possessed by few individuals are attractive to some purchasers because the exclusivity of the brand itself reflects the high quality. Berger and Heath (2008) examined the idea that the purchase of unique products is enhanced when few people own such products. These consumers' concerns for exclusivity are more focused on products such as fashion brands having high quality. From a theoretical perspective, some consumers have the perception that the best products are not accessible to everyone (Becker, 1991). It follows that this research involves consumers' use of functional products, which expose consumers to exclusive brands that evoke beliefs in the naïve theory of exclusivity. In the current market trends, many consumers hold a belief that quality products or desirable products are popular (Deval et al., 2013). To better understand this phenomenon, the naïve theory of popularity is applied.

In contrast to the naïve theory of exclusivity, the naïve theory of popularity suggests that consumers perceive the interest of many people as a favourable attribute. Most people will rate products favourably, based on the simple fact that many people have purchased them. For popular brands, the purchase is triggered when many people own the product. Hellöfs and Jacobson (1999) observed that popularity is associated with higher quality. Many theories explain the effect of popularity cues, such as the theory of herding, signalling theory, social influence theory and bandwagon effects. In research conducted by Berger and Heath (2007, 2008), it was found that some

categories of products are more attractive to buyers when many consumers use them because of the perception that the choice of many people cannot be wrong.

Thus, some consumers believe that high-quality brands are exclusive, while others believe that high-quality brands are popular; therefore, beliefs regarding brand quality, exclusivity and popularity are positive cues to evaluate a genuine brand.

Consequently, this discussion led to the following hypothesis:

***Hypothesis 2: The perceived quality, perceived exclusivity and perceived popularity cues will mediate the effect of the existence of a counterfeit on the evaluation of the genuine brand.***

Figure 7 below displays the Hypothesis 2 conceptual framework.

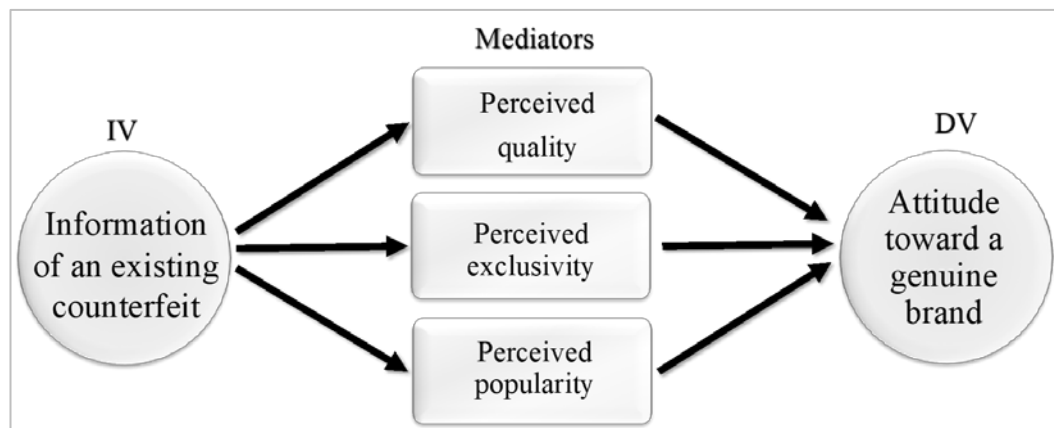


Figure 7. Hypothesis 2 conceptual framework.

Based on Figure 7, it was expected that beliefs regarding perceived quality, perceived exclusivity and perceived popularity would mediate the effect of the existence of a counterfeit on consumers' attitudes toward a genuine brand. The method of the research hypothesis investigation will be explained in the following sections.

### 3.3 Philosophical Approach in this Research

This study employed a positivist philosophical paradigm, based on Bryman and Bell (2015), Clough and Nutbrown (2012), Crotty (1998), Grant and Giddings (2002), Guba and Lincoln (1994), Oliver (2013) and Polit and Hungler (1999). This approach was employed because this study sought to determine the effect of existing counterfeit products on the genuine brand, which reflected the need to identify and assess the causes that influence outcomes. Figure 8 presents a summary of this study's philosophically based positivist paradigm.

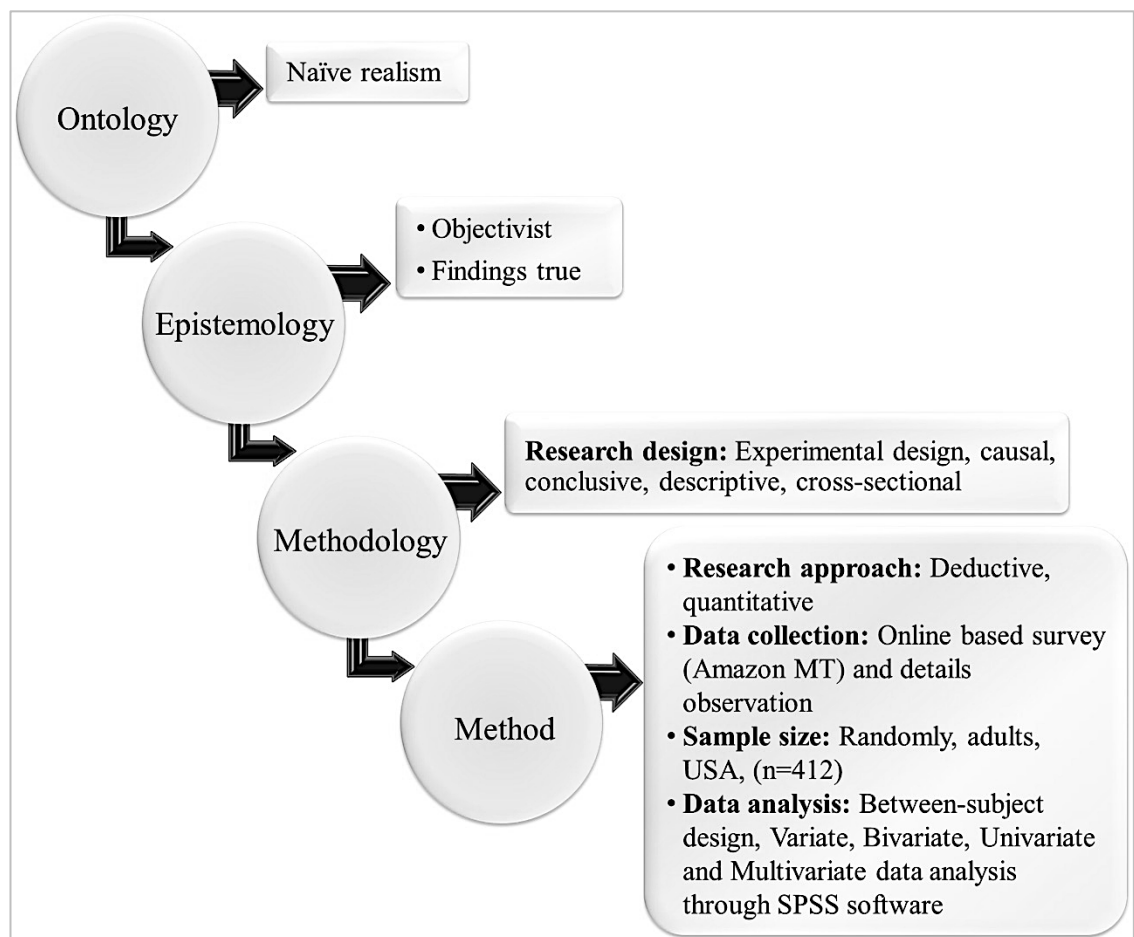


Figure 8. Summary of the research philosophy—a positivist paradigm approach.

Among the positivist paradigms, this research aimed to determine the actuality about the effect of the existing counterfeit on the evaluation of the genuine brand through naïve realism ontology. Naïve realism led to the philosophically grounded epistemology of significant objectivity (Crotty, 1998) to explain the nature of the relationship between an existing counterfeit in the market and consumer attitudes and choices to purchase a genuine brand, and to discover the objective reality (Crotty, 1998; Grant & Giddings, 2002). This was achieved through systematic and detailed observation, while the hypothesis testing was undertaken through experimentation and verification (Clough & Nutbrown, 2012; Crotty, 1998; Grant & Giddings, 2002; Guba & Lincoln, 1994; Polit & Hungler, 1999).

Given that the research variables could be measured by empirical instruments among naïve theories and thus verifies the data that could be analysed using statistical procedures, this study employs a quantitative method to allow generalisation of the results measuring the respondents' insights. This investigation included assumptions about testing naïve theories deductively (Polit & Hungler, 1999) building in protections against bias, controlling for alternative interpretations, and being able to generalise and replicate the findings (Clough & Nutbrown, 2012; Crotty, 1998; Grant & Giddings, 2002; Guba & Lincoln, 1994; Polit & Hungler, 1999).

### **3.4 Justification for Research Methodology**

This study used a deductive method, rather than an inductive approach, because the research topic largely relied on theories that needed to be explained using the findings. A deductive approach is a method that is used to explain the findings of the research in relation to available theories, whereas an inductive approach does not relate the findings of the research to existing theories (Aaker & McLoughlin, 2010; Bryman & Bell, 2015; Grant & Giddings, 2002; Polit & Hungler, 1999). Hence, the results



obtained from this research were analysed using quantitative techniques to provide information to help address the research topic (Aaker & McLoughlin, 2010; Bryman & Bell, 2015).

A quantitative method was used in the current study to generate necessary information in the form of summarisation from large samples, which were used to reach conclusions due to the following reasons. First, given that the research comprised a large sample (Cooper, Schindler, & Sun, 2006), relationships between the research variables were measured (Bryman & Bell, 2015; Bryman & Cramer, 1995). The respondents voluntarily completed a closed-ended self-administered questionnaire survey. Using a survey reduced the required money and time expenditure, and made the process easier for both the respondents and researcher, as opposed to undertaking interviews or using a focus group. Second, empirical data were collected using quantitative methods, rather than qualitative, because a qualitative method is effective in describing complicated situations that will provide knowledge and understanding of the research (Zikmund, D'Alessandro, Winzar, Lowe, & Babin, 2014). However, this method could not be relied on when reaching the conclusions because it does not present empirical data in the form of numbers, and does not measure the relationships between variables (Bryman & Bell, 2015); therefore, a quantitative method was employed in this research.

This research collected information based on empirical quantitative data through online surveys and detailed observation (Bryman & Bell, 2015; Creswell & Creswell, 2017; Malhotra, 2010). Given that this research heavily relied on experimentations, an observation method was employed. This helped in collecting data by observing the behaviour of consumers in relation to the selected products (Malhotra, 2010). This study also used a closed-ended survey method—which entailed gathering respondents'

opinions and attitudes—because this method is very effective when the observed population is too large to handle. However, an experimental method is generally used, compared with a survey method that relies on collecting data from larger sample sizes.

Causal research design that shows the cause and effect relationship between the variables being examined was used in this research because this research examined the effects of counterfeit products on genuine brands. Malhotra (2010) found that multiple variables affect marketing research objects. Instances in which counterfeit products had a positive versus negative effect on genuine brands were also determined by the experiment's respondents. Given that perceived quality, perceived exclusivity and perceived popularity cues were the mediators between the independent variable (of information about an existing CBP) and the dependent variable (of consumers' attitudes toward a genuine brand), this study employed a between-subjects design.

Experimental strategy was the main method for this research—rather than case studies, grounded theory, history archival analysis or ethnography—because the research question was related to a causal relationship and the research applied a descriptive approach. When choosing the best strategy to use with a research topic, several factors need to be considered (Rosenthal & Rosnow, 2008), such as whether the research considers contemporary issues and whether behavioural events are controlled by the research. Given that the research topic was existing counterfeit products, which are a problem of the twenty-first century, a history or archival strategy was irrelevant because there is not much historical information about the counterfeiting of products. Therefore, overall, a quantitative approach was the best approach for the current study.

### **3.5 Experimental Design**

This research not only had an experimental research orientation to identify the causal relationship between existing counterfeits in the market and attitudes toward a

genuine brand and choosing to purchase a genuine brand, but was also closely related to process-oriented research, rather than problem-oriented research. This research involved experiments conducted under five different conditions to test the hypotheses through a couple of studies. Table 6 below presents a comparison of the first and second studies.

Table 6

*Study 1 and Study 2—Quantitative Enquiry*

	Study 1: Quantitative enquiry	Study 2: Quantitative enquiry
Objectives	1. To establish causality between existing counterfeits in the market on choices to purchase a genuine brand and attitudes toward a genuine brand when the genuine brand is unknown 2. To explore the effect of gender on choices to purchase a genuine brand when it has an existing counterfeit in the market	1. To establish causality between an existing counterfeit in the market and choice to purchase a genuine brand and attitude toward a genuine brand 2. To explore the effect of brand awareness on choice to purchase a genuine brand and attitude toward a genuine brand when it has an existing counterfeit in the market 3. To explore the mediating effect of perceived quality, exclusivity and popularity on attitude toward a genuine brand when it has an existing counterfeit in the market
Methodology	Closed-ended questions in structured questionnaire, and online-based survey on Amazon Mechanical Turk	
Subject	201 US adults (average age = 34.8; 58.2% male)	211 US adults (average age = 36.4; 55.5% male)
Recruitment	Randomly assigned	
Analysis	Chi-square, analysis of variance (ANOVA)	Chi-square, ANOVA and SPSS Hayes macro

The objective of the experiments was to establish causality (Kim et al., 2018).

The research had three different research orientations: descriptive, relational and experimental (Rosenthal & Rosnow, 2008). Many experiments aim to test a theory, rather than establish external validity (Mook, 1983). Therefore, experimental research was the best method to answer the research questions.

### **3.6 Survey Design**

The raw data were collected by a structured, self-administered, online-based survey consisting of closed-ended questions. The survey was built using the Qualtrics survey tool ([www.qualtrics.com](http://www.qualtrics.com)) because this software places all raw data in an accumulated place that offers optimal security and includes advanced features that are presented simply, and allows both the researcher and respondents to access and upload data from anywhere (Snow & Mann, 2013).

The research survey was posted from the hosted Qualtrics service to Amazon Mechanical Turk (MTurk) by using the survey link template. After completion, a code was generated in Qualtrics, stating: 'Thank you for completing our survey. Your response has been recorded'. The survey name and descriptive assignment in MTurk cost \$500 that was reimbursed by AUT. The survey result was then uploaded to a separate SPSS sheet.

The use of open-ended questions was excluded because the sample size was large, and the answers provided would need to be coded. Coding can be unreliable and may produce biased results, whereas closed questions can be analysed easily, and the answers can be compared with those of other respondents (Cooper et al., 2006; Rosenthal & Rosnow, 2008). A self-administered questionnaire survey was chosen for several reasons related to the researcher and respondents. For the researcher, not only was relevant target sampling selected, but also personal behaviour and opinion were measured (Bourque & Fielder, 2003; Bryman & Bell, 2015; Zikmund et al., 2014), which protects respondents from social influence. For the respondents, the questions could be easily answered from any device (including smartphones) at any time and from any location if they were connected to the internet. Moreover, the survey took no more than five minutes.

Closed-ended questions were easy for respondents to understand, considering their diverse backgrounds and characters (Bryman & Bell, 2015; Malhotra et al., 2006), and saved their time by offering specific options designed to measure specific variables. Given that closed-ended questions were used in both studies, a nominal and interval measurement scale was designed. The nominal scale was required in the final questions of the questionnaire, which needed the respondents to identify personal information about gender, age, civil status, highest education level, social role and annual income. To check manipulation in Study 2, the responses were analysed to see if the respondents had memorised the selected survey product's price and if they were aware of (familiar with) the given brands.

The research used experiments as the main method because the research question was related to a causal relationship (Rosenthal & Rosnow, 2008). Experiments were conducted via two studies. The research results were not influenced by the investigator because the inquirer was independent from the researcher. The results were objective facts produced through the study process.

### **3.7 Ethical Consideration**

Prior to commencing the studies, ethical clearance was sought from Auckland University of Technology Ethics Committee (AUTEC) on 11 June 2018, with the Ethics Application Number 18/226. See the ethical approval and participant information sheet in Appendix D.

### **3.8 Measurement of Research Variables**

The research variables consisted of dependent variables, independent variables and mediator variables. Such variables measurement was crucial for research validity purposes.

### **3.8.1 Dependent variables.**

**3.8.1.1 Major dependent variables (*attitude and choice*).** The choice to purchase a genuine brand and attitude toward a genuine brand were the focal research dependent variables. Existing studies have investigated the effect of pre-purchase information on consumer choice (Bettman, 1991; Chakraborty et al., 1997; Kirmani & Rao, 2000; Tom et al., 1998), while others have noted that interpersonal reasons affect consumers' choices and attitudes toward a genuine brand (Koklic et al., 2016; Marticotte & Arcand, 2017; Martinez & Jaeger, 2016; Pueschel et al., 2017; Wilcox, Kim, et al., 2009). In the same way, this research involved multi-item scales that evaluated attitude toward a genuine brand A, and attitude toward a genuine brand B. Such attitudes were separately measured by developing a pair of multiple-item scales. Each scale included three comparable items situated on reverse ends of a seven-point bipolar matrix, where 1 = 'very bad', 'very unfavourable' and 'very unattractive' were presented on the left side of the scales, and 7 = 'very good', 'very favourable' and 'very attractive' were presented on the right side of the scales.

**3.8.1.2 Beliefs regarding an existing counterfeit.** The variable regarding an existing counterfeit in the market measured respondents' beliefs regarding the genuine brand in this research. The measurement divided this variable into two groups: the genuine brand had an existing counterfeit in the market or did not have an existing counterfeit in the market. Variate data analysis was used in this manipulation check among descriptive statistics, which were frequency tables, mean scores and standard deviations. The concept of an existing counterfeit in the market was measured to explore the effect of perceived genuine brand quality when the brand had a counterfeit on consumers' attitudes toward the genuine brand and choice to purchase the genuine

brand. The respondents were expected to be able to identify their perceived quality of the genuine brand when it did and did not have a counterfeit in the market.

**3.8.1.3 Naïve theory measurement variables.** This research also involved multi-item scales that evaluated the perceived quality variable. The variables that were measured are—popularity and exclusivity—in the context of naïve theory measurement, by developing two multiple-item scales. Each scale included two similar items positioned on opposite ends of a seven-point bipolar matrix: 1 = ‘very popular’ and ‘everybody can afford them’ were presented on the left side and 7 = ‘very exclusive’ and ‘only selected people can buy them’ were presented on the right side of the scales.

**3.8.1.4 Manipulation check variables.** In the second study, memorising the genuine brand cost and familiarity with the genuine brand were created as additional dependent variables for manipulation check purposes. Memorising the genuine brand cost variable was measured with a single-choice answer in a vertical position: ‘\$500’, ‘\$1,000’, ‘\$1,500’, ‘\$2,000’ and ‘\$2,500’. Familiarity with the genuine brand variable was also measured with a single-choice answer on a horizontal position with a separate label for each surveyed brand: ‘yes’ and ‘no’.

**3.8.2 Independent variables.** There were three key variables in the study: information about an existing counterfeit in the market (the main independent variable) and gender and brand awareness (additional control variables). The variable on information about an existing counterfeit in the market was manipulated with two conditions: genuine brand A had a counterfeit and genuine brand B had a counterfeit. This variable related to consumer behaviour in terms of whether information about an existing counterfeit in the market affected (positively versus negatively) consumer choice and attitudes toward a genuine brand (A versus B), or had no effect.

The gender and brand awareness variables were also manipulated in this study. The gender variable was manipulated in the first study as a male and female condition, while the brand awareness variable was manipulated in the second study as a known genuine brand and an unknown genuine brand condition. These variables also related to consumer behaviour in terms of whether they affected (positively versus negatively) consumer choice and attitude toward a genuine brand (A versus B), or had no effect.

**3.8.2.1 Mediator variables.** Perceived quality, perceived exclusivity and perceived popularity were the mediator variables in the second study, based on naïve theories of society. Each variable was measured for genuine brand A and genuine brand B separately on a seven-point Likert matrix scale, using a single answer (1 = ‘strongly disagree’ and 7 = ‘strongly agree’) to rate the following statements: ‘the genuine brand is of high quality’, ‘the genuine brand makes me feel unique’ and ‘the genuine brand is perceived to be popular’.

### **3.9 Research Validity and Reliability**

The validity of the experiment could be internal, external or construct (Wilson, Jones, Miller, & Pentecost, 2009), while realisms of it could be experimental, mundane or psychological (E. Aronson & Carlsmith, 1968; J. Aronson, Harré, & Way, 1994). To establish the validity and reliability of this research, multiple studies were undertaken to observe the pattern of outcomes through the continuing process. To establish the research reliability, the internal consistency of the multiple-item measure determined the consistency of the respondents’ responses across the items regarding attitude toward a genuine brand when it had an existing counterfeit in the market. The research’s internal reliability was statistically measured with Cronbach’s  $\alpha$ . After determining the experiment reliability, the effect of an existing counterfeit in the market on attitude



toward a genuine brand and choice to purchase a genuine brand established the research validity.

Local Italian fashion products were chosen to help in gathering information from consumers and because there are numerous genuine brands selling these products (Chevalier & Mazzalovo, 2012; Nueno & Quelch, 1998). In addition, these products were very relevant to the research topic. In Study 1, the products were genuine business bags for men made by unknown brands (Gosto versus Fortunato) and genuine fashion handbags for women made by unknown brands (Giulia versus Florence). These products were handmade using calf leather, and came with unique, recognisable designs. In Study 2, the products were genuine travel bags made by known brands (Fendi versus Gucci) and were genuine Italian products made in a softer version of canvas, crafted from a coated microfiber fabric with the logo motif. Study 2 also included genuine laptop bags made by unknown brands (Valextra versus Del Giudice), which were both genuine Italian and made from a softer version of calf leather.

The respondents were given two similar genuine brands, one of which had existing counterfeit products in the market while the other did not have counterfeit products in the market. The respondents ended up choosing the genuine brand with no counterfeit product in the market. This indicates that brand awareness is still maintained, however the existence of counterfeit products in the market affected the genuine brands.

### **3.10 Data Collection**

Primary data were very relevant to the area of current research, unlike secondary data, and contributed more to addressing the topic of research because they helped the researcher reduce the time and resources that would have been required to conduct

physical research (Zikmund et al., 2014). Primary data also included information collected by the researcher to address the issues in the research topic.

This research used an internet panel survey in the US—Amazon MTurk. This method in quantitative methodology and this particular panel source were preferred because they were a cost-effective way to gather a large sample of respondents to provide sufficient data for statistical analysis and to enable in-depth responses on the existing counterfeit issue. In addition, because this research used genuine Italian known and unknown brands, US adults were involved to ensure they did not know the unknown Italian brands in the survey.

This research employed a systematic and scientific approach regarding the methods of data collection, involving the use of natural science experimentation testing and modification of the hypotheses. Moreover, the respondents in this research were randomly assigned to one of the two studies to test the effect of counterfeit information on the evaluation of the genuine brand: customers' awareness, customers' unawareness or general attention.

In this research, the data collection method involved a self-administered online-based survey. Qualtrics Survey Software for research professionals is an online survey platform for collecting and analysing data of marketing research. This was used because it was easy to build the survey and insert graphics and tables, it enabled the survey to be exported to Microsoft Word, and it allowed the survey link to be copied to Amazon MTurk, where the data were collected to save the researcher time and effort. The survey contained closed-ended questions in which respondents were required to choose an answer from the options provided by the researcher (Bryman & Bell, 2015) on a seven-point Likert and bipolar matrix scale. Using open-ended questions was excluded because the sample size was large, and the answers provided would have needed to be

coded. Coding can be unreliable and may produce biased results, whereas closed questions can be analysed easily, and the answers can be compared with those of other respondents (Cooper et al., 2006; Rosenthal & Rosnow, 2008). The data were collected in Amazon MTurk, and then transferred to SPSS software for statistical analysis purposes.

### **3.11 Sampling**

In this research, the sample survey randomly targeted (Creswell & Creswell, 2017; Grant & Giddings, 2002; Malhotra, 2010) 412 US adult men and women, aged over 18, as the object of this study. This research needed to examine a large population to avoid errors; however, it was difficult to collect data from a large region because it would be costly and time consuming. Hence, it was prudent to choose a group of people from a small population to represent the entire population, which is known as sampling.

Most of the current research sample involved people with undergraduate degrees and full-time employment. They were a mix of married and single people, and their average income was between \$50,000 and \$59,999. They were randomly assigned to one of the two study conditions to avoid improper representation of the target population. This sample population had rationale relevant to this research because genuine Italian known and unknown brands were used in the experiment to make sure that the US respondents had no or low brands awareness during answering the survey. The specific requirements of the target group were few enough that Amazon MTurk could yield a sufficiently accurate response.

### **3.12 Data Analysis**

Given that the sample size was larger than 200 respondents, multivariate data analysis was involved in the research method (Hair, Black, Babin, & Anderson, 2014; Heiman, 2013; Tabachnick & Fidell, 2013), using SPSS software. SPSS software is a

statistical tool for social scientists to analyse the raw quantitative data gathered (Field, 2013; Gaur & Gaur, 2009; Hair et al., 2014). The data enabled analysis in the two studies.

**3.12.1 Discussion of intended analysis.** The data collected were entered and sorted into an SPSS spreadsheet to enable simple and advanced quantitative testing. In both studies, the choice to purchase a genuine brand, as the first dependent variable, was analysed with a bivariate data analysis method through binary logistic regression and a chi-square test. Meanwhile, attitude toward a genuine brand, as the second dependent variable, was analysed with a univariate ANOVA. Multivariate data analysis was also used in the second study through mediation analysis of the Hayes method to test the mediation variables.

### **3.13 Conclusion**

This chapter has described the methods used in this investigation and the different strategies used in this research to minimise the limitations of the research methodology. Given that the target responses might disrupt achieving the research objectives, this research used a large sample of 412 responses from both men and women, aged 18 and above, with no specific civil status, education degree, social roles or socioeconomic status. All responses were voluntary, as respondents consented to respond and could withdraw at any time if they felt uncomfortable during any survey stage, before completing the survey. A limitation of this study was that the experimental conditions were complex; hence, the research used a control condition in the first study through a positive control group, which indicated that the experiments functioned as expected. The next two chapters present the findings of the empirical studies on the effect of existing counterfeit products on consumers' evaluation of genuine brands.

## **Chapter 4: Empirical Study 1**

Study 1 aimed to empirically examine consumers' attitudes toward a genuine brand and choosing to purchase the brand when it has counterfeit products (presence versus absence) in the market. Additionally, the study aimed to test whether the effect of information about an existing counterfeit was reversed with regards to gender. It was expected gender would influence the relationship between the existing counterfeit and the evaluation of the genuine brand because gender identity might interact with the product type and naïve theories of society (Steinhart et al., 2014). In this case that men concentrate more on self while women emphasise more social context (Kurt, Inman, & Argo, 2011; Winterich, Mittal & Ross Jr, 2009). This study created three different scenarios among 201 US residents to test Hypothesis 1 and manipulate gender (male: Gosto versus Fortunato, and female: Giulia versus Florence) and counterfeit products (presence versus absence) in the market through the context of unknown products to exclude the influence of the brand-specific effect. The main dependent variables were attitude toward a genuine business bag for men or a genuine fashion handbag for women, and the choice to purchase them, measured through a close-ended question format (see Study 1 survey in Appendix E). It chose to examine business bags for men and handbags for women because this fashion products type has more counterfeit issues than other products. So, there are consumers who purchase a counterfeit fashion because they value the prestige and social context while others do not purchase the counterfeit products because they value self-context.

### **4.1 Research Objective and Hypotheses**

The research aimed to answer the following questions:

1. What is the effect of a counterfeit product on the genuine brand?

2. Do counterfeit products have a positive (versus negative) effect on genuine brands?

Providing answers to these questions would indicate the effects of an existing counterfeit on the genuine brand. To answer the first two research questions, the first hypothesis was tested in this study:

***Hypothesis 1a:*** *The existence of a counterfeit brand positively affects the evaluation of the genuine brand.*

***Hypothesis 1b:*** *The existence of a counterfeit brand negatively affects the evaluation of the genuine brand.*

Evaluation of the genuine brand included two dependent variables: attitude toward a genuine brand and choice to purchase a genuine brand. The experiment design, preliminary analysis, hypothesis testing, naïve theory measurement and discussion of Study 1 will be presented in the forthcoming sections.

## **4.2 Experiment Design**

The overall research design was a three (information of an existing CBP, absence for both brands, and presence for brand A versus presence for brand B) between-subjects design and cover story for reality purposes. Three diverse scenarios were used in this study: a control condition with no reference to a counterfeit existing in the market, and two scenarios for the manipulation of counterfeit market availability (presence versus absence) in the context of gender. This resulted in three experimental conditions (control condition and two counterfeit conditions); two genuine brands (for men: genuine Gosto versus Fortunato business bags) as a baseline of consumers' attitudes and choice regarding a genuine brand; a genuine brand with an existing counterfeit versus genuine brand (i.e., genuine Gosto business bag has existing counterfeit versus genuine Fortunato business bag or genuine Fortunato business bag

has existing counterfeit versus genuine Gosto business bag). The same occurred for women: in the control condition (information of an existing CBP absence for both genuine brands Florence and Giulia handbags) and in the manipulation condition (genuine Florence handbag has existing counterfeit versus genuine Giulia handbag or genuine Giulia handbag has existing counterfeit versus genuine Florence handbag).

#### **4.3 Stimulus Material and Procedure**

The respondents were asked by the online survey to select a gender to create a subdivision of males and females, and then respondents were randomly assigned to either the control condition or the counterfeit manipulated condition. The respondents were asked to read information about the two brands. The male information was:

Imagine that you are going to buy a business bag at this moment. You find two of the latest luxury exclusive collections: a Gosto and a Fortunato. Both are Italian genuine calf leather, handmade by local designers.

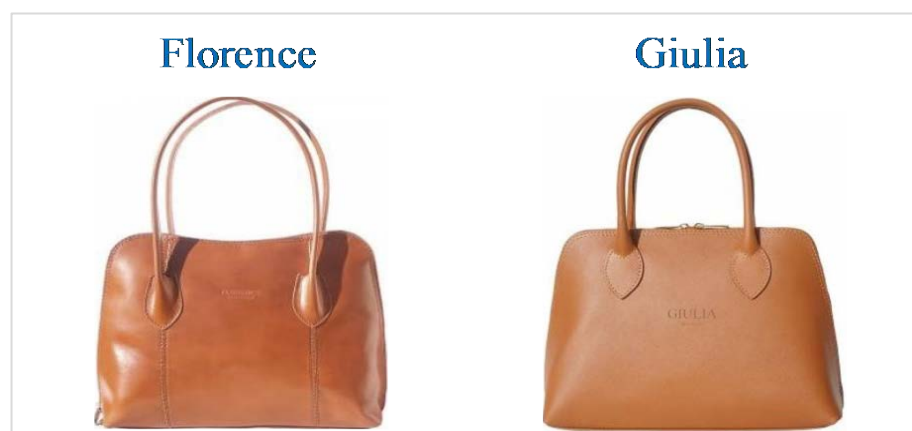
In the same manner, the female information was:

Imagine that you are going to buy a fashion handbag at this moment. You find two of the latest luxury exclusive collections: a Giulia and a Florence. Both are Italian genuine calf leather, handmade by local designers.

The respondents were then shown two genuine Italian brands that were unknown for American respondents—business bags for men (Gosto and Fortunato) and fashion bags for women (Giulia and Florence). In this study, the experimenter used pictorial stimuli to integrate the textual scenario in choosing bags with similar colour, size and design to ensure these variables did not affect the participants' attitude and choice (see Figures 9 and 10). In this control condition, neither the male nor female respondents were given information regarding the existing counterfeits of these bags.



*Figure 9.* Target products in the male context during Study 1.



*Figure 10.* Target products in the female context during Study 2.

Those in the counterfeit manipulated condition were randomly divided into two conditions: brand A has an existing counterfeit in the market versus brand B has an existing counterfeit in the market. In the counterfeit condition, when brand A had a counterfeit, the male respondents were given information that Gosto had an existing counterfeit in the market, and female respondents were given information that Giulia had an existing counterfeit in the market. Similarly, when brand B had a counterfeit in the market, the men were given information that Fortunato had an existing counterfeit in the market, and women were given information that Florence had an existing counterfeit in the market. The respondents in both conditions were then asked to choose the genuine brand A or genuine brand B. They were then asked to rate each brand on a



seven-point bipolar scale regarding attitude toward the product (Tybout, Sternthal, Malaviya, Bakamitsos, & Park, 2005). Three items anchored as 1 = ‘very bad’, ‘very unfavourable’ and ‘very unattractive’ were presented on the left side of the scales and 7 = ‘very good’, ‘very favourable’ and ‘very attractive’ were presented on the right side of the scales to measure attitude toward a genuine brand. For naïve theory measurement, the respondents in all conditions were then asked to rate the following statement on a seven-point bipolar scale (where 1 = ‘very popular’ and ‘everybody loves them’ and 7 = ‘very exclusive’ and ‘only selected people can buy them’): ‘Good products usually are ...’. To measure existing counterfeit beliefs, the respondents were asked to rate the following statement on a seven-point bipolar scale (where 1 = ‘have counterfeits in the market’ and 7 = ‘do not have counterfeits in the market’): ‘Good products usually are...’. Finally, the respondents were asked for demographic information. After completing the survey within approximately three minutes, they were thanked for their participation.

#### **4.4 Preliminary Analysis**

With the purpose of providing an outline of the data and confirming the validity and reliability of the study results, preliminary analysis was undertaken before testing the hypotheses.

**4.4.1 Respondents’ demographic characteristics.** A total of 201 US residents (average age = 34.76,  $SD = 10.26$ , 58.2% males) from an Amazon MTurk online panel, participating in return for US\$0.50, completed the online survey questionnaires for the research.

**4.4.2 Reliability of attitude toward a genuine brand.** In the scale reliability analysis, to test the multi-item scales measuring attitude toward a genuine brand A and attitude toward a genuine brand B, Cronbach’s coefficient alpha was used. The items

allowed respondents to rate each brand on a seven-point bipolar matrix-type scale. Three items indicating 1 = 'very bad', 'very unfavourable' and 'very unattractive' were presented on the left side of the scales, and 7 = 'very good', 'very favourable' and 'very attractive' were presented on the right side of the scales to measure attitude toward a genuine brand A. To determine participant attitudes toward genuine brand B, the same measures were used. Each item allowed for positive, neutral or negative responses. Both attitude toward genuine brand A (Cronbach's  $\alpha = .93$ ) and attitude toward genuine brand B (Cronbach's  $\alpha = .94$ ) exceeded the minimum acceptability level (Cronbach's  $\alpha = .70$ ). The high alpha values indicated a high level of internal consistency in the three items when measuring attitude toward genuine brand A and genuine brand B. Thus, the measurement of the dependent variables was reliable for this study.

## **4.5 Hypothesis Testing**

The current study hypotheses were tested among three main concepts of hypothesis testing, which were to find out statistically significant differences. If the results were rejected with null hypothesis and/or accepted the alternative hypothesis would determine whether the results could be generalised since the current study approach was between subject design. To test the hypotheses, bivariate data analysis with cross-tabulation, chi-square and binary logistic regression was required to test consumers' choice to purchase a genuine brand, given that choice is a non-continuous variable. Additionally, univariate data analysis using ANOVA was required to test consumers' attitude toward a genuine brand, given that attitude is a continuous variable.

**4.5.1 Choice to purchase a genuine brand.** For marketing decision makers, the choice to purchase a genuine brand is important to understand to know whether the existence of counterfeit products results in positive or negative consumer behaviour. This study explored the effect of counterfeit information (on one brand condition) on

consumer choice by conducting binary logistic regression, cross-tabulation test and chi-square test, given that choice is a discrete variable (Field, 2013).

This study first examined whether gender affected choice to purchase a genuine brand when it has an existing counterfeit in the market, using binary logistic regression. To test this effect under the presence (versus absence) of an existing counterfeit in the market (Huber, Payne, & Puto, 1982), this study ran bi-logistic regression analysis to investigate the interaction between two factors: information about an existing counterfeit in the market and gender (see the results table in Appendix F). The results indicated that information about an existing counterfeit in the market was significant ( $\beta = 2.12$ ,  $SE = .63$ , Wald = 11.33,  $p < .01$ ). However, the interaction effect between information about an existing counterfeit in the market and gender was not significant ( $\beta = .05$ ,  $SE = .82$ , Wald = .004,  $p > .10$ ) and the main effect of gender on consumer choice to purchase a genuine brand was also not significant ( $\beta = -.05$ ,  $SE = .66$ , Wald = .006,  $p > .10$ ). Consequently, the results of the bi-logistic analysis indicated that gender did not influence consumer choices or interact with information about an existing counterfeit in the market. Thus, further analysis analysed the data by ignoring the gender factor. Following this, the study undertook cross-tabulation and chi-square tests to investigate the effect of the presence versus absence of information about an existing counterfeit on choice to purchase a genuine brand (see the results tables in Appendix G).

For men and women, reported overall, there was a significant effect of information about an existing counterfeit in the market on choice to purchase a genuine brand, with  $\chi^2(2) = 32.04$ ,  $p < .001$  indicating a significant difference. The majority of customers chose to purchase the genuine brand that did not have a counterfeit in the market. Specifically, the majority of respondents (51.6%, 32/62) chose to purchase

brand B in the control group, which increased to 68.8% (55/80) when genuine brand A had an existing counterfeit in the market. Statistically, this indicated 51.6% (32/62) versus 68.8% (55/80;  $\chi^2(1) = 4.32, p = .038$ ). Correspondingly, as aforementioned, 51.6% (32/62) respondents chose to purchase genuine brand B in the control group, which decreased to a minority of respondents (20.3%, 12/59) choosing to purchase genuine brand B when it had an existing counterfeit in the market. This was less than in the control condition (51.6% or 32/62 versus 20.3% or 12/59;  $\chi^2(1) = 12.78, p < .001$ ).

Interestingly, in the experimental conditions, the majority of respondents (68.8%, 55/80) chose to purchase genuine brand B when genuine brand A had a counterfeit existing in the market, whereas a minority of respondents (20.3%, 12/59) chose to purchase genuine brand B when it had a counterfeit existing in the market. The information about the existence of a counterfeit changed the probability that the respondents would choose to purchase the genuine brand, based on bivariate data analysis using chi-square test (68.8% or 55/80 versus 20.3% or 12/59;  $\chi^2(1) = 31.87, p < .001$ ). The experiment results pattern was replicated across both male and female respondents, as shown in Figure 11.

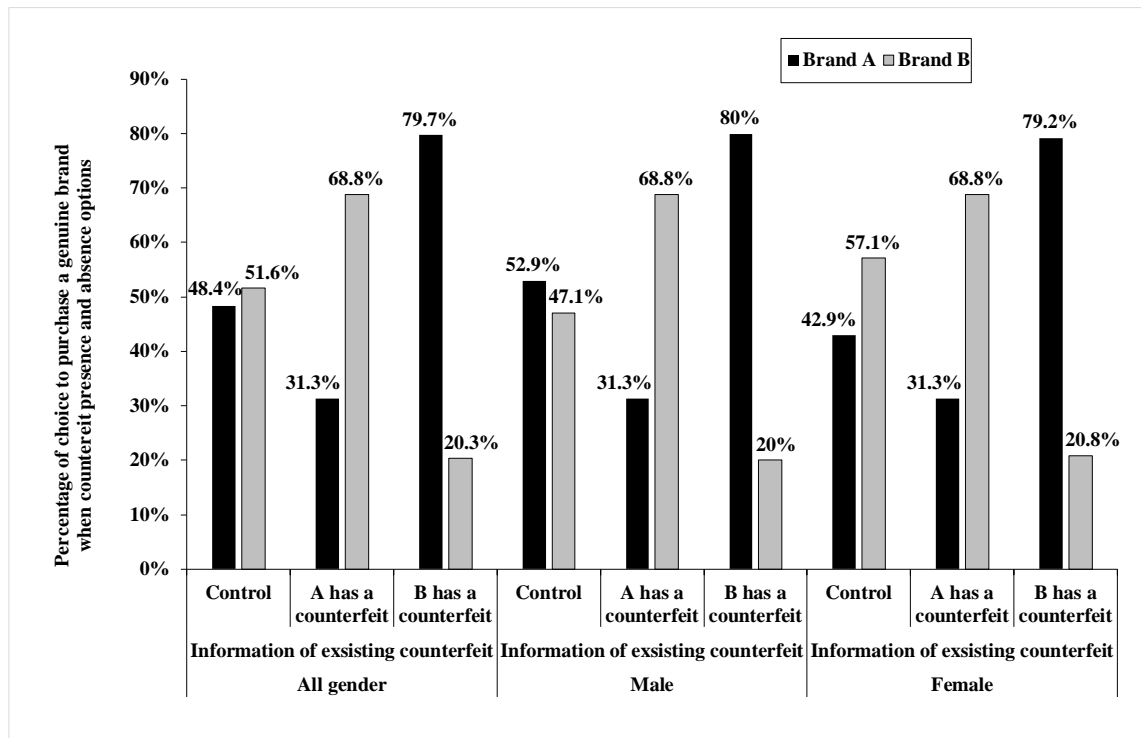


Figure 11. Percentage of respondents selecting a genuine brand in Study 1.

Therefore, it could be concluded that information about an existing counterfeit significantly and negatively affected the genuine brand, since the respondents decided to purchase the genuine brand that did not have a counterfeit existing in the market. Moreover, gender did not affect consumer choices regarding purchasing a genuine brand.

**4.5.2 Attitude toward a genuine brand.** For marketing decision makers, consumers' attitudes toward a genuine brand are significant to understand whether the existence of counterfeit products results in positive or negative consumer behaviour. This study explored the effect of counterfeit information (on one brand condition) on consumer attitude by conducting an ANOVA, given that attitude is a continuous variable (Field, 2013).

**4.5.3 Attitude toward a genuine brand BA (attitude BA).** The attitude BA variable indicated consumers' attitude toward genuine brand B minus attitude toward

genuine brand A, and was an original dependent variable developed by this study. The attitude BA variable indicated attitude toward genuine brand B data with a positive sign, and attitude toward genuine brand A data with a negative sign. This enabled easier observation of the attitude variable; therefore, the attitude BA variable became the core attitude measurement through the data analysis process.

First, this study ran an ANOVA to observe attitude toward genuine brand BA. Interestingly, the ANOVA results indicated a significant main effect of information about a counterfeit existing in the market on consumer attitude toward genuine brand BA in both the male and female conditions ( $M_{\text{control}} = .54$ ,  $SD = 1.89$ , versus  $M_{\text{A\_CFs}} = .58$ ,  $SD = 1.62$ , versus  $M_{\text{B\_CFs}} = -.88$ ,  $SD = 1.39$ ;  $F(2,195) = 15.65$ ,  $p < .001$ ). However, there was no significant main effect of gender on consumer attitude toward genuine brand BA in the male and female conditions ( $M_{\text{male}} = .17$ ,  $SD = 1.85$ , versus  $M_{\text{female}} = .10$ ,  $SD = 1.65$ ;  $F(1,195) = .17$ ,  $p > .10$ ). Similarly, there was no significant interaction effect between information about a counterfeit existing in the market and gender on consumer attitude toward genuine brand BA in the male and female conditions ( $F(2,195) = .28$ ,  $p > .10$ ).

The planned contrast strategy involved testing a priori data following significant ANOVA results because the researcher was interested in following up the analysis with some specific comparisons over scores or means to test more focused hypotheses than the overall ANOVA test (Field, 2013). In this case, planned contrast tests were based on linearly independent pairwise comparisons among the estimated marginal means. This study found an insignificant interaction effect of gender and information about an existing counterfeit (presence versus absence) on consumers' attitude BA toward a genuine brand ( $F(2,195) = .28$ ,  $p > .10$ ). The planned contrast confirmed the study's expectation. First, women in all conditions had a positive attitude toward a genuine

brand that had no counterfeit, and were more likely to purchase a genuine brand than when they were not specially in counterfeit conditions ( $M_{\text{control}} = .62$  versus  $M_{\text{A\_CFs}} = .50$  versus  $M_{\text{B\_CFs}} = -1.06$ ,  $F(2,195) = 8.110$ ,  $p < .001$ ). Correspondingly, men had a negative attitude toward a genuine brand that had a counterfeit, and were less likely to purchase a genuine brand than when they were not specially in counterfeit conditions ( $M_{\text{control}} = .47$  versus  $M_{\text{A\_CFs}} = .64$  versus  $M_{\text{B\_CFs}} = -.75$ ,  $F(2,195) = 7.873$ ,  $p < .01$ ).

Second, respondents in all conditions were unlikely to purchase a genuine brand that had a counterfeit, regardless of gender. Respondents in the control condition were ( $M_{\text{male}} = .47$  versus  $M_{\text{female}} = .62$ ,  $F(1,195) = .123$ ,  $p > .10$ ). Respondents in the genuine brand B condition with no counterfeit were more likely to purchase genuine brand B ( $M_{\text{male}} = .64$  versus  $M_{\text{female}} = .50$ ,  $F(1,195) = .134$ ,  $p > .10$ ); likewise, respondents in the genuine brand B condition with a counterfeit were less likely to purchase genuine brand B ( $M_{\text{male}} = -.75$  versus  $M_{\text{female}} = -1.06$ ,  $F(1,195) = .475$ ,  $p > .10$ ).

#### **4.5.4 Attitude toward genuine brand A (attitude A).**

This study then ran an ANOVA to observe attitude toward genuine brand A. The ANOVA revealed a significant main effect of information about a counterfeit on consumers' attitudes toward genuine brand A in the control and counterfeit conditions ( $M_{\text{control}} = 4.99$ ,  $SD = 1.41$ , versus  $M_{\text{A\_CFs}} = 5.23$ ,  $SD = 1.38$ , versus  $M_{\text{B\_CFs}} = 5.68$ ,  $SD = 1.04$ ;  $F(2,195) = 4.35$ ,  $p < .05$ ). However, there was no significant main effect of gender on consumer attitude toward genuine brand A in the male and female conditions ( $M_{\text{male}} = 5.21$ ,  $SD = 1.39$ , versus  $M_{\text{female}} = 5.40$ ,  $SD = 1.22$ ;  $F(1,195) = 1.16$ ,  $p > .10$ ). Similarly, there was no significant interaction effect between information about a counterfeit and gender on consumer attitude toward genuine brand A in the male and female conditions ( $F(2,195) = .06$ ,  $p > .10$ ).

#### **4.5.5 Attitude toward genuine brand B (attitude B).**

This study ran further ANOVA tests to observe attitude toward genuine brand B. The further statistical tests revealed a significant main effect of information about a counterfeit on consumer attitude toward genuine brand B in the male and female conditions ( $M_{\text{control}} = 5.53$ ,  $SD = 1.19$ , versus  $M_{\text{A\_CFs}} = 5.81$ ,  $SD = 1.13$ , versus  $M_{\text{B\_CFs}} = 4.81$ ,  $SD = 1.26$ ;  $F(2,195) = 12.50$ ,  $p < .001$ ). However, there was no significant main effect of gender on consumer attitude toward genuine brand B in the male and female conditions ( $M_{\text{male}} = 5.38$ ,  $SD = 1.27$ , versus  $M_{\text{female}} = 5.50$ ,  $SD = 1.23$ ;  $F(1,195) = .37$ ,  $p > .10$ ). Correspondingly, there was no significant interaction effect between information about a counterfeit and gender on consumer attitude toward genuine brand B in the male and female conditions ( $F(2,195) = .45$ ,  $p > .10$ ).

#### **4.5.6 Overall results of attitude toward a genuine brand.**

It was significant to test the first research hypothesis to explore the effect of information about an existing counterfeit in the market on consumers' attitude toward a genuine brand. There was a significant main effect of information about a counterfeit on consumer attitude toward a genuine brand, assessed with univariate data analysis using ANOVA (Hair et al., 2014) (see the results tables in Appendix H). The results of the ANOVA indicated that evaluation of the genuine brand when it did not have a counterfeit in the market was significantly more positive than evaluation when it had a counterfeit in the market. Table 7 highlights the effect of information about an existing counterfeit in the market on respondents' attitude toward a genuine brand in Study 1.



Table 7

*Effect of Existing Counterfeit on Study 1 Respondents' Attitude toward a Genuine Brand*

DV_Attitude	IV_CFs	Mean	Std deviation	<i>F</i>	Sig.
Attitude BA	Control	0.54	1.89	15.652	.000
	A has CFs	0.58	1.62		
	B has CFs	-.88	1.39		
Attitude A	Control	4.99	1.41	4.348	.014
	A has CFs	5.23	1.38		
	B has CFs	5.68	1.04		
Attitude B	Control	5.53	1.19	12.500	.000
	A has CFs	5.81	1.13		
	B has CFs	4.81	1.26		

From Table 7 above, statistically, there was a significant direct effect of information about an existing counterfeit in the market on respondents' attitude toward a genuine brand ( $M_{A\_CFs} = .58$ ,  $SD = 1.62$ , versus  $M_{B\_CFs} = -.88$ ,  $SD = 1.39$ ;  $F(2,195) = 15.65$ ,  $p < .001$ ). The experiment results pattern was replicated across both attitude toward genuine brand A and attitude toward genuine brand B, as shown in Figure 12 below.

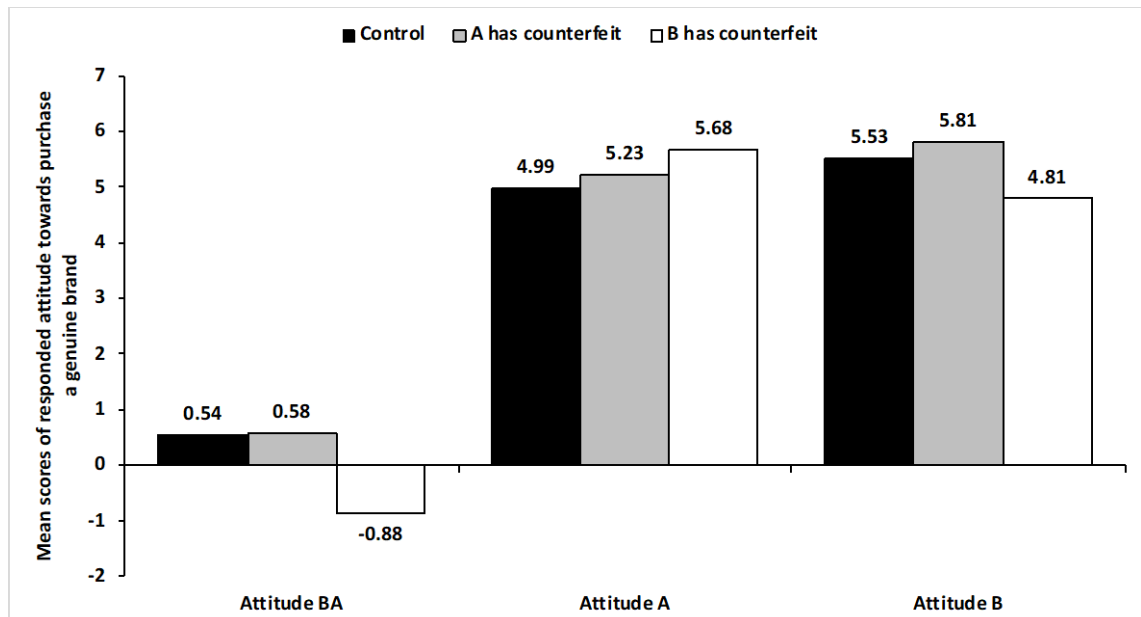


Figure 12. Mean scores of respondents' attitude toward a genuine brand in Study 1 conditions.

This result suggests that information about an existing counterfeit significantly and negatively affects consumers' attitude toward a genuine brand, since respondents' attitude toward a genuine brand when it did not have a counterfeit was more positive than their attitude toward it when it had a counterfeit. Moreover, gender did not affect consumer attitude toward a genuine brand. Ultimately, the results of the binary logistic regression, chi-square test and ANOVA supported Hypotheses 1b—that the existence of a counterfeit product negatively affects evaluation of the genuine brand.

#### 4.6 Further Testing (Naïve Theory Measurement)

Beliefs regarding the genuine brand quality of the genuine brand variable were measured in the research with two variables (popularity and exclusivity) and the existence of a counterfeit product in the market. The measurement divided the variables into two groups on a seven-point bipolar scale (1 = 'very popular, everybody loves them' versus 7 = 'very exclusive, only selected people can buy them'). Beliefs

regarding an existing counterfeit were also measured on a seven-point bipolar scale (1 = 'has counterfeits in the market' versus 7 = 'does not have counterfeits in the market'). The variate data analysis used in this measurement among descriptive statistics included frequency tables, mean ( $M$ ) and standard deviation ( $SD$ ).

**4.6.1 Popular versus exclusive.** To explore beliefs regarding the genuine brand quality variable, respondents were expected to identify their beliefs regarding the quality of the genuine brand if it was popular or exclusive. The results indicated that the majority of respondents (60.5%, 162/201) believed that the genuine brand was of high quality if it was exclusive ( $M = 4.32$ ,  $SD = 1.69$ ), while the minority believed that the genuine brand was high quality if it was popular.

**4.6.2 'Everybody loves them' versus 'only selected people can buy them'.** Respondents were then expected to identify their beliefs regarding the quality of the genuine brand if everybody loved it or if only selected people could buy it. Surprisingly, the results indicated that equal numbers of respondents (38.3%, 77/201) indicated that the genuine brand was high quality if everybody loved it or if only selected people could buy it ( $M = 3.98$ ,  $SD = 1.73$ ).

**4.6.3 Beliefs regarding existing counterfeit (counterfeit versus no counterfeit).**

Respondents were also expected to identify whether the genuine brand was of high quality if it had counterfeits or did not have counterfeits in the market. Respondents were asked to rate the following statement: 'a good brand usually has counterfeits in the market' versus 'a good brand usually does not have counterfeits in the market'. The results indicated that the majority of the respondents (47.8%, 96/201) viewed the genuine brand to be of high quality if it had counterfeits in the market

( $M = 3.71$ ,  $SD = 1.92$ ), while the minority believed that the genuine brand was of high quality if it did not have counterfeits existing in the market.

#### **4.7 Discussion for Study 1**

Consumers are expected to purchase a brand that does not have a counterfeit in the market over a brand that does have a counterfeit in the market, especially when they have no strong expectations or awareness about the common brand attributes as they do not know the genuine brand (Evangelidis & Van Osselaer, 2018). Moreover, customers with a negative previous experience of purchasing a counterfeit product may avoid purchasing a genuine brand with a counterfeit in the market because of concern that the product they purchase may be a counterfeit, rather than an original, given that customers' past experience relates significantly and negatively to brand choice (Ojiaku & Osarenkhoe, 2018). In fact, no gender effect was supported by Friedmann and Lowengart (2018) who suggest in the brand selection context, there is generally similar acquisition for males and females. Some consumers perceive a genuine brand to be high quality if it is exclusive, rather than popular, which supports naïve theories of societies. However, some consumers perceive a genuine brand to be high quality if they perceive its exclusivity (Becker, 1991; Berger & Heath, 2007, 2008) and others if they perceive its popularity (Berger & Heath, 2007, 2008; Deval et al., 2013; Hellofs & Jacobson, 1999); empirically there are those who perceived the genuine brand quality if it had a counterfeit existing in the market.

#### **4.8 Conclusion to Study 1**

Interestingly, information about an existing counterfeit in the market was observed to affect the genuine brand negatively, and the Study 1 results support H1b—that an existing counterfeit affects the genuine brand significantly and negatively. The results also confirmed no gender effect on consumers' choice to purchase a genuine

brand and attitude toward a genuine brand. The respondents chose to purchase a genuine brand that did not have a counterfeit in the market, indicated by the chi-square test, and had a negative attitude toward a genuine brand that had an existing counterfeit in the market, indicated by ANOVA statistics. The respondents preferred not to purchase a genuine brand with a counterfeit in the market because they felt that their purchase might be a counterfeit, rather than an original, based on the existence of first-class counterfeiters who create products that cannot be distinguished from the original. Thus, the respondents thought an original product could be a counterfeit and preferred to purchase products without counterfeits to ensure they purchased the original. Moreover, some consumers have had negative past experiences when purchasing counterfeit items, which lead them to avoid purchasing brands with a counterfeit in the market (Ang et al., 2001; Ojiaku & Osarenkhoe, 2018; Tom et al., 1998).

The experiment was realistic because the information about an existing counterfeit in the market affected the respondents' attitude toward a genuine brand. When genuine brand A had a counterfeit, Cronbach's  $\alpha = .93$ , and when genuine brand B had a counterfeit, Cronbach's  $\alpha = .94$ . Moreover, the results of the binary logistic regression, chi-square test and ANOVA indicated the validity of the experiment and supported Hypothesis 1b—that the existence of a counterfeit brand significantly and negatively affected the evaluation of the genuine brand.

## **Chapter 5: Empirical Study 2**

The first study indicated that for an unknown genuine brand, consumers have more positive attitudes toward the genuine brand and choose to purchase the genuine brand more frequently when it does not have a counterfeit version in the market. The second study was conducted to confirm this result and verify whether consumers' perceptions of the quality, exclusivity and popularity of the genuine brand mediate the relationship between (the presence versus absence of) an existing counterfeit in the market and consumers' attitude toward a genuine brand, and whether a similar effect was reversed with regard to known genuine brands.

In the first study, one reason that the respondents chose not to purchase a genuine brand when it had a counterfeit was because they could confuse the genuine version and counterfeit version of the survey products. Thus, Study 2 fixed the price to assure the new respondents that all survey products were genuine. The main dependent variables were attitude toward a known genuine travel bag or unknown genuine laptop bag, and choice to purchase these products, measured through a closed-ended question format (see Study 2 survey in Appendix I). The following sections present the experiment design, preliminary analysis, manipulation check, hypothesis testing, naïve theory measurement, discussion and conclusion for Study 2.

### **5.1 Research Objective and Hypotheses**

This study aimed to answer similar questions to those asked in the first study, in the context of awareness of genuine brands:

1. What is the effect of a counterfeit product on the genuine brand?
2. Do counterfeit products have a positive (versus negative) effect on genuine brands?

3. Why are consumers' preferences for the genuine brand enhanced when the counterfeit products of the brand are (versus when they are not) available in the market?

Providing answers to the first and second questions will indicate the effects of an existing counterfeit on the genuine brand. To answer the research questions, the first hypothesis was tested in this study:

***Hypothesis 1a:** The existence of a counterfeit brand positively affects the evaluation of the genuine brand.*

***Hypothesis 1b:** The existence of a counterfeit brand negatively affects the evaluation of the genuine brand.*

As mentioned in Study 1, the evaluation of the genuine brand in Hypothesis 1 included two dependent variables: attitude toward a genuine brand and choice to purchase a genuine brand.

Moreover, this study aimed to answer further questions regarding whether perceived quality, exclusivity and popularity signalling explain the effect of counterfeits on the original genuine brand. Providing answers for the third question indicated these factors' mediating role on the effects of an existing counterfeit on the genuine brand. To answer this research question, the second hypothesis was also tested in this study:

***Hypothesis 2:** The perceived quality, exclusivity and popularity will mediate the effects of the existence of a counterfeit on the evaluation of the genuine brand.*

The evaluation of the genuine brand in Hypothesis 2 included one dependent variable: attitude toward a genuine brand.

## **5.2 Experiment Design**

The overall research design was a 2 (information of an existing CBP: presence for brand A versus presence for brand B)  $\times$  2 (brand awareness: known versus unknown

brands) between-subjects design. As aforementioned, Study 1 tested the effect of information about an existing counterfeit on the choice to purchase a genuine brand and attitude toward a genuine brand when the consumers did not know the brand. Study 2 aimed to confirm this effect and test whether this effect arose if consumers knew the genuine brand. This study created two different scenarios to test the research hypothesis. It manipulated brand awareness (known brands—Fendi and Gucci—versus unknown brands—Valextra and Del Giudice) and a counterfeit existing in the market (presence versus absence) for both males and females. This study ignored the gender factor, based on Study 1's result that gender did not affect consumer attitudes and choice to purchase a genuine brand when a counterfeit existed in the market. This resulted in the creation of two experimental conditions. The first was counterfeit experimental manipulated conditions: known brand condition, when a genuine brand has an existing counterfeit versus a genuine brand (i.e., genuine Fendi travel bag versus genuine Gucci travel bag has existing counterfeit or genuine Gucci travel bag versus Fendi travel bag has existing counterfeit). Similarly with an unknown brand condition (i.e., genuine Valextra laptop bag versus genuine Del Giudice laptop bag has existing counterfeit or genuine Del Giudice laptop bag versus Valextra laptop bag has existing counterfeit).

### **5.2.1 Stimulus material and procedure.**

Respondents were randomly assigned to the counterfeit condition in two scenarios (known brand versus unknown brand). Respondents were informed in the survey that the experimenter wished to know their preference regarding travel bags or laptop bags. The respondents were first asked to read the information about the two brands. In the known brand condition, the information was:

Imagine that you are going to buy a travel bag at this moment. You find two of the latest luxury exclusive collections: a Fendi and a Gucci. Both are genuine



Italian made and come in a softer version of canvas, crafted from a coated microfiber fabric with the logo motif.

In the same way, for the unknown brand condition, the information was:

Imagine that you are going to buy a laptop bag at this moment. You find two of the latest luxury exclusive collections: a Valextra and a Del Giudice. Both are genuine Italian made and come in a softer version of calf leather.

As with the first study, the experimenter used pictorial stimuli to integrate the textual scenario by choosing bags of similar colour, size and design, as well as applying a fixed price, to ensure that these variables did not affect respondents' attitude and choice (see Figures 13 and 14).



*Figure 13.* Target products in known brand condition in Study 2.



*Figure 14.* Target products in unknown brand condition in Study 2.

In the second study, similar to the first study scenarios, two diverse scenarios were used for the manipulation of existing counterfeits in the market (presence versus absence) in the context of a known genuine brand (Gucci and Fendi) and unknown genuine brand (Valextra and Del Giudice). After reading this scenario, the respondents responded to numerous questions. The main dependent variables—measured as in the first study—were respondents’ attitude toward a genuine brand and choice to purchase a genuine brand. Respondents in both conditions were asked to rate each brand on a seven-point bipolar scale. Three items anchored as 1 = ‘very bad’, ‘very unfavourable’ and ‘very unattractive’ were presented on the left side of the scales, while 7 = ‘very good’, ‘very favourable’ and ‘very attractive’ were presented on the right side of the scales, to measure attitude toward a genuine brand.

The respondents in the two manipulated conditions in specific measurement reported how they perceived the quality, exclusivity and popularity of the genuine known travel bags (Fendi and Gucci) and unknown laptop bags (Valextra and Del Giudice). Each variable was measured for genuine brand A and genuine brand B separately on seven-point Likert matrix scales, using a single answer to rate the

following statements: 'the genuine brand is of high quality', 'the genuine brand makes me feel unique' and 'the genuine brand is perceived to be popular' (1 = 'strongly disagree' and 7 = 'strongly agree').

The respondents then reported their overall knowledge of the counterfeit products to explore their beliefs regarding the existing counterfeits in the market. The respondents were asked to indicate the survey bags' price to ensure they were aware of the equal price of both genuine bags. The survey also involved two further manipulation checks for familiarity with each genuine brand to indicate the respondents' level of awareness of the brand on a single item, as well as how much they liked each genuine brand on a seven-point bipolar scale (1 = 'not at all' and 7 = 'very much'). Finally, the respondents were asked for demographic information. After completing the survey within approximately three minutes, they were thanked for their participation.

To test Hypothesis 1, respondents in the known condition were randomly divided into two groups (brand A has an existing counterfeit in the market versus brand B has an existing counterfeit in the market). In the known condition, when brand A had a counterfeit, the respondents were given information that Gucci had an existing counterfeit in the market, while the unknown brand group were given information that Valextra had an existing counterfeit in the market. Similarly, when brand B had a counterfeit in the market, the respondents in the known brand condition were given information that Fendi had an existing counterfeit in the market, and the unknown brand group were given information that Del Giudice had an existing counterfeit in the market. The respondents in both conditions were then asked to choose genuine brand A or genuine brand B.

Investigating the second hypothesis of the study involved testing the specific indirect effects of an existing counterfeit in the market on consumers' attitude toward a

genuine brand through consumers' perceived quality, exclusivity and popularity of the genuine brand in known and unknown brand conditions. These were examined separately and the total indirect of this effect was tested. As such, the bootstrapping method was recommended to overcome potential difficulties caused by unmet assumptions (Preacher & Hayes, 2008; Zhao, Lynch Jr, & Chen, 2010). Thus, bootstrapping procedures were used to evaluate the indirect effects and examine their significance by using confidence intervals. The multiple mediation models were tested by using the SPSS Hayes macro to conduct the main analysis (Preacher & Hayes, 2008).

### **5.3 Preliminary Analysis**

In the same manner as Study 1, Study 2 performed a preliminary analysis before testing the hypotheses to provide an outline of the data and confirm the validity and reliability of the results of Study 2.

**5.3.1 Respondents' demographic characteristics.** A total of 211 US residents (average age = 36.35,  $SD = 11.27$ , 55.5% males) from an Amazon MTurk online panel responded and, in return for US\$0.50, completed the online survey questionnaires for Study 2.

#### **5.3.2 Reliability.**

##### **5.3.2.1 Reliability of attitude toward a genuine brand.**

Cronbach's coefficient alpha was used in the scales reliability analysis to test the multi-item scales for measuring attitudes toward genuine brand A and attitudes toward genuine brand B, similar to that used in Study 1. The items allowed respondents to rate each brand on a seven-point scale. Three items of 1 = 'very bad', 'very unfavourable' and 'very unattractive' were presented on the left side of the scales, and 7 = 'very good', 'very favourable' and 'very attractive' were presented on the right side of the scales to measure attitude toward genuine brand A and genuine brand B. Each item allowed for

negative, neutral or positive responses. Both attitude toward genuine brand A (Cronbach's  $\alpha = .93$ ) and attitude toward genuine brand B (Cronbach's  $\alpha = .94$ ) exceeded the minimum acceptability level (Cronbach's  $\alpha = .70$ ). The high alpha values indicated that the three items used had a high level of internal consistency as measures of attitude toward genuine brand A and B, similar to Study 1. Hence, the measurement of the dependent variables was reliable for this study.

## 5.4 Manipulation Checks

This study used manipulation checks to increase its statistical power and the reliability of the dataset (Oppenheimer, Meyvis, & Davidenko, 2009). Two variables were used in the manipulation check—familiarity with the brand, and memorising the products' survey cost—to observe how these variables affected attitude toward a genuine brand and choice to purchase a genuine brand.

**5.4.1 Brand awareness.** The majority of respondents (54.8%, 116/211) were familiar with Fendi, and 90% (190/211) were familiar with Gucci. In contrast, a minority of respondents (15.6%, 33/211) were familiar with Valextra, while 16.1% (34/211) were familiar with Del Giudice. In the average, the majority of respondents 72.5% (153/211) were familiar with the known brands while the majority of respondents (15.9%, 33.5/211) were not familiar the unknown brands. These results indicate that most of the respondents were familiar with the known genuine brands and were not familiar with the unknown genuine brands by chi-square test (72.5%, 153/211) versus 15.9%, 33.5/211;  $\chi^2(1) = 137.21, p < .001$ ). Thus, this manipulation check was successful, and the respondents were familiar with the known genuine brands and not familiar with the unknown genuine brands.

#### **5.4.2 Memorising the products' survey cost.**

In the manipulation check, the respondents in both conditions were asked if they had memorised the survey bags' prices to cause a reconstruction in the individual memory of that event (Loftus & Palmer, 1974). They were asked: 'what was the price of bags above?'. As expected, the majority of respondents (86.7%, 183/211) remembered the price of \$1,500. The result indicates that this manipulation check was successful, and the respondents were aware of the equal price of both genuine brands.

### **5.5 Hypothesis Testing**

In the same way as Study 1, bivariate data analysis with binary logistic regression, cross-tabulation and chi-square was required to test consumers' choice to purchase a genuine brand, given that choice is a discrete variable that is restricted to a particular value. Further, univariate data analysis using ANOVA was required to test consumers' attitude toward a genuine brand, given that attitude is an internal variable.

#### **5.5.1 Choice to purchase a genuine brand.**

The reasons for consumers' choice to purchase a genuine brand are crucial to understand, to determine whether the existence of a counterfeit product results in positive or negative consumer behaviour, as in Study 1. This study first ran a bi-logistic regression analysis to investigate the interaction between two factors, given that choice is a non-continuous variable (Field, 2013) (see the results table in Appendix J).

This study first examined whether the brand awareness factor affected choice to purchase a genuine brand when a counterfeit existed in the market. This study used binary logistic regression to test whether such effect was higher in the presence (versus absence) of a counterfeit in the market (Huber et al., 1982). A bi-logistic regression analysis was used to investigate the interaction between two factors: information about

an existing counterfeit in the market and brand awareness. The results indicated that information about an existing counterfeit in the market was significant ( $\beta = 2.12$ ,  $SE = .45$ ,  $Wald = 22.36$ ,  $p < .001$ ). However, the interaction effect between information about an existing counterfeit and brand awareness was not significant ( $\beta = -.17$ ,  $SE = .63$ ,  $Wald = .07$ ,  $p > .10$ ). The main effect of brand awareness was also not significant ( $\beta = .17$ ,  $SE = .41$ ,  $Wald = .17$ ,  $p > .10$ ). Thus, the results of the bi-logistic analysis indicated that brand awareness did not influence choice or interact with information about an existing counterfeit. Thus, in the future, this study analysed the data by ignoring the brand awareness factor. Cross-tabulation and chi-square tests were then used to investigate the effect of the presence versus absence of information about an existing counterfeit on the choice to purchase a genuine brand (see the results tables in Appendix K).

For known and unknown conditions, reported overall, there was a significant effect of information about an existing counterfeit on choice to purchase a genuine brand, with  $\chi^2(1) = 45.22$ ,  $p < .001$  indicating a significant difference in choice to purchase the genuine brand. The majority of customers would purchase the genuine brand that did not have a counterfeit in the market. Specifically, when genuine brand A had a counterfeit, the majority of respondents (70.6%, 84/106) chose to purchase genuine brand B over genuine brand A. When genuine brand B had a counterfeit, the minority of respondents (29.4%, 35/105) chose to purchase brand B over brand A. Thus, interestingly, in the same way to Study 1, an existing counterfeit affected the genuine brand significantly and negatively. That is, respondents decided not to purchase the genuine brand that had a counterfeit. Information about the existence of a counterfeit changed the probability of respondents choosing to purchase a genuine brand, as assessed by bivariate data analysis using chi-square test (70.6%, 84/106 versus 29.4%,

35/105;  $\chi^2(1) = 45.22, p < .001$ ). The experiment results pattern was replicated across both known and unknown conditions, as shown in Figure 15.

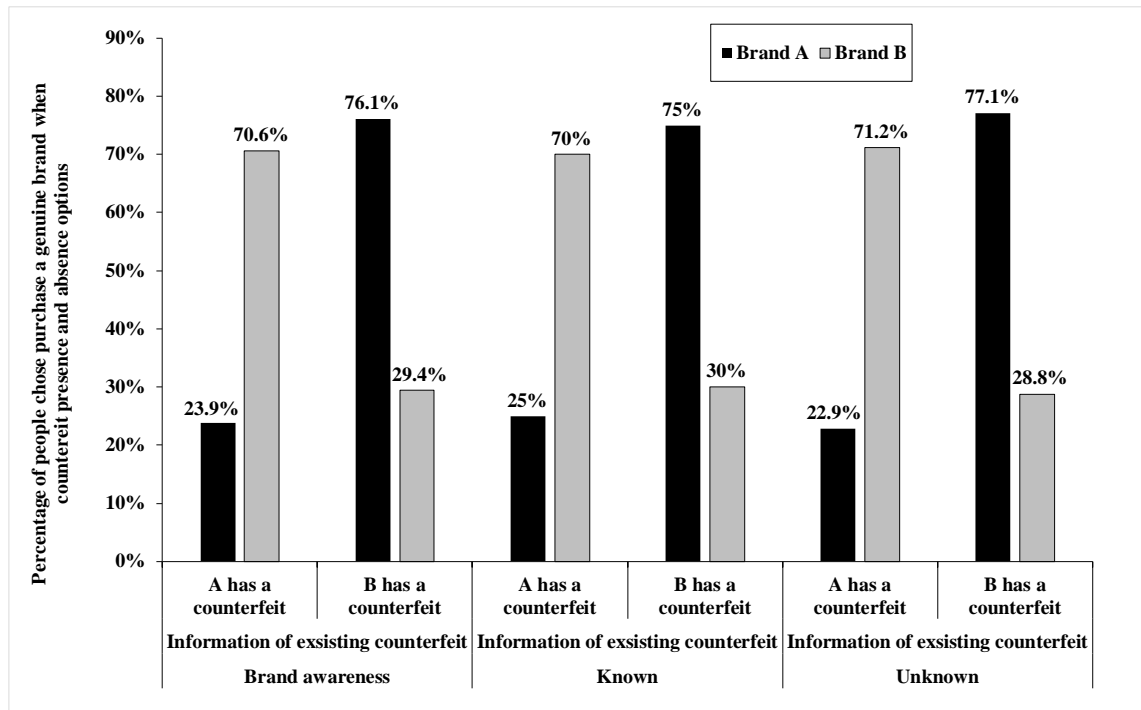


Figure 15. Percentage of respondents selecting a genuine brand in Study 2.

It follows that information about an existing counterfeit significantly and negatively affected the genuine brand because the respondents decided not to purchase the genuine brand that had a counterfeit existing in the market.

Moreover, brand awareness did not affect consumer choice to purchase a genuine brand, as shown in Figure 15. That is, for the known brand condition, there was a significant effect of information about a counterfeit on choice to purchase a genuine brand, with  $\chi^2(1) = 20.57, p < .001$  indicating a significant difference in choice to purchase the genuine brand. The majority of customers would purchase the genuine brand that did not have a counterfeit existing in the market. Specifically, when brand A had a counterfeit in the market, the majority of respondents (70. %, 42/53) chose to purchase genuine brand B over genuine brand A. When brand B had a counterfeit in the



market, a minority of respondents (30%, 18/51) chose brand B over brand A. A similar result existed for the unknown condition. There was a significant effect of information about an existing counterfeit in the market on choice to purchase a genuine brand, with  $\chi^2(1) = 24.67, p < .001$  indicating a significant difference in choice to purchase the genuine brand. The majority of customers would purchase the genuine brand that did not have a counterfeit existing in the market. Specifically, when brand A had a counterfeit in the market, the majority of respondents (71.2%, 42/53) chose to purchase genuine brand B over genuine brand A. When brand B had a counterfeit, a minority of respondents (28.8%, 17/54) chose brand B over brand A. Thus, interestingly, in the same manner as the known brand condition, the existing counterfeit affected the genuine brand significantly and negatively. That is, respondents decided not to purchase the genuine brand that had a counterfeit existing in the market. Information about the existence of a counterfeit changed the probability of respondents choosing to purchase a genuine brand, based on bivariate data analysis using chi-square test, for a known brand (70.%, 42/53 versus 30%, 18/51;  $\chi^2(1) = 20.57, p < .001$ ) and an unknown brand (71.2%, 42/53 versus 28.8%, 17/54;  $\chi^2(1) = 24.67, p < .001$ ).

### **5.5.2 Attitude toward a genuine brand.**

Similar to Study 1, for marketing decision makers, attitude toward a genuine brand is significant to understand, to know whether the existence of a counterfeit product results in positive or negative consumer behaviour. This study explored the effect of counterfeit information (on one brand condition) on consumer attitude by conducting an ANOVA, given that attitude is a continuous variable (Field, 2013).

**5.5.3 Attitude toward genuine brand BA (attitude BA).** In the same way to Study 1, the attitude BA variable indicated the attitude toward genuine brand B minus attitude toward genuine brand A, and was an original binary variable developed by the

current study. The attitude BA variable presented attitude toward genuine brand B data with a positive sign and attitude toward genuine brand A data with a negative sign. This made the observation of the attitude variable easier; therefore, the attitude BA variable became the core attitude measurement through the data analysis process.

First, this study ran an ANOVA to observe attitude toward genuine brand BA. Interestingly, in these data, there was a significant mean effect of information about an existing counterfeit in the market on respondents' attitude toward genuine brand BA ( $M_{A\_CFs} = .69$ ,  $SD = 1.53$ , versus  $M_{B\_CFs} = -.11$ ,  $SD = 1.64$ ;  $F(1,207) = 13.44$ ,  $p < .001$ ). However, there was no significant mean effect of brand awareness on respondents' attitude toward genuine brand BA ( $M_{\text{known brand}} = .44$ ,  $SD = 1.47$ , versus  $M_{\text{unknown brand}} = .15$ ,  $SD = 1.77$ ;  $F(1,207) = 1.67$ ,  $p > .10$ ). Likewise, there was no significant interaction effect between information about an existing counterfeit and brand awareness on the attitude toward genuine brand BA ( $F(1,207) = .43$ ,  $p > .10$ ). Thus, the results supported Hypotheses 1b, similar to the Study 1 result—that the existence of a counterfeit brand significantly and negatively affected the evaluation of the genuine brand. The results also confirmed that there was no brand awareness effect on consumers' choice to purchase a genuine brand and attitude toward a genuine brand.

To confirm the ANOVA data analysis, in the same way as Study 1, a planned contrast strategy was used to test a priori data. The results indicated an insignificant interaction of information about an existing counterfeit and brand awareness on consumer attitude toward genuine brand BA ( $F(1,207) = .43$ ,  $p > .10$ ). The planned contrast confirmed the expectations. First, the respondents chose not to purchase a genuine brand that had a counterfeit. Specifically, in the unknown brand condition, the respondents chose not to purchase a genuine brand that had a counterfeit ( $M_{A\_CFs} = .62$  versus  $M_{B\_CFs} = -.32$ ,  $F(1,207) = 4.458$ ,  $p < .05$ ). Similarly, in the known brand

condition, the respondents had a negative attitude toward a genuine brand that had a counterfeit and were less likely to purchase a genuine brand than an alternative opinion ( $M_{A\_CFs} = .76$  versus  $M_{B\_CFs} = .10$ ,  $F(1,207) = 9.482$ ,  $p < .01$ ).

Second, respondents in all conditions chose not to purchase a genuine brand that had a counterfeit, regardless of the brand awareness conditions. For genuine brand B with the absence of a counterfeit, respondents were more likely to purchase genuine brand B ( $M_{known\_brand} = .76$  versus  $M_{unknown\_brand} = .62$ ,  $F(1,207) = .202$ ,  $p > .10$ ). Likewise, for genuine brand B with the presence of a counterfeit, respondents were less likely to purchase genuine brand B ( $M_{known\_brand} = .10$  versus  $M_{unknown\_brand} = -.32$ ,  $F(1,207) = 1.891$ ,  $p > .10$ ).

#### **5.5.4 Attitude toward genuine brand A (attitude A).**

This study then ran an ANOVA to observe attitude toward genuine brand A. The ANOVA revealed a significant main effect of information about a counterfeit existing in the market on consumer attitude toward genuine brand A in the known and unknown conditions ( $M_{A\_CFs} = 5.13$ ,  $SD = 1.31$ , versus  $M_{B\_CFs} = 5.60$ ,  $SD = 1.33$ ;  $F(1,207) = 6.66$ ,  $p < .05$ ). However, there was no significant main effect of brand awareness on respondents' attitude toward genuine brand A ( $M_{known\ brand} = 5.33$ ,  $SD = 1.19$ , versus  $M_{unknown\ brand} = 5.39$ ,  $SD = 1.47$ ;  $F(1,207) = .10$ ,  $p > .10$ ). Likewise, there was no significant interaction effect between information about an existing counterfeit in the market and brand awareness on attitude toward genuine brand A ( $F(1,207) = .43$ ,  $p > .10$ ).

#### **5.5.5 Attitude toward genuine brand B (attitude B).**

This study ran a further ANOVA test to observe attitude toward genuine brand B. The additional statistical tests revealed a marginally significant main effect of information about a counterfeit existing in the market on consumer attitude toward

genuine brand B in known and unknown conditions ( $M_{A\_CFs} = 5.82$ ,  $SD = 1.21$ , versus  $M_{B\_CFs} = 5.49$ ,  $SD = 1.22$ ;  $F(1,207) = 3.88$ ,  $p < .10$ ). However, there was no significant mean effect of brand awareness on respondents' attitude toward genuine brand B ( $M_{\text{known brand}} = 5.77$ ,  $SD = 1.05$ , versus  $M_{\text{unknown brand}} = 5.55$ ,  $SD = 1.37$ ;  $F(1,207) = 1.79$ ,  $p > .10$ ). Likewise, there was no significant interaction effect between information about an existing counterfeit in the market and brand awareness on attitude toward genuine brand B ( $F(1,207) = 1.24$ ,  $p > .10$ ).

### 5.5.6 Overall results of attitude toward a genuine brand.

The first study results indicated a significant main effect of information about a counterfeit existing in the market on consumer attitude toward a genuine brand. Study 2 confirmed this result with univariate data analysis using ANOVA (see the results tables in Appendix L). The results of the ANOVA showed that the evaluation of the genuine brand when it had no counterfeit in the market was significantly better than the evaluation when it had a counterfeit. Table 8 highlights the effect of information about an existing counterfeit in the market on respondents' attitude toward a genuine brand in Study 2.

Table 8

*Effect of Existing Counterfeit on Study 2 Respondents' Attitude toward a Genuine Brand*

DV_Attitude	IV_CFs	Mean	Std deviation	<i>F</i>	Sig.
Attitude BA	A has CFs	0.69	1.53	13.44	.000
	B has CFs	-.11	1.64		
Attitude A	A has CFs	5.13	1.31	6.66	.011
	B has CFs	5.60	1.33		
Attitude B	A has CFs	5.82	1.21	3.88	.050
	B has CFs	5.49	1.22		

From the table above, statistically ( $M_{A\_CFs} = .69$ ,  $SD = 1.53$ , versus  $M_{B\_CFs} = -.11$ ,  $SD = 1.64$ ;  $F(1,207) = 13.44$ ,  $p < .001$ ), there was a significant mean effect of information about an existing counterfeit in the market on respondents' attitude toward genuine brand BA. The experiment results pattern was replicated across both attitude toward genuine brand A and attitude toward genuine brand B, as shown in Figure 16 (below).

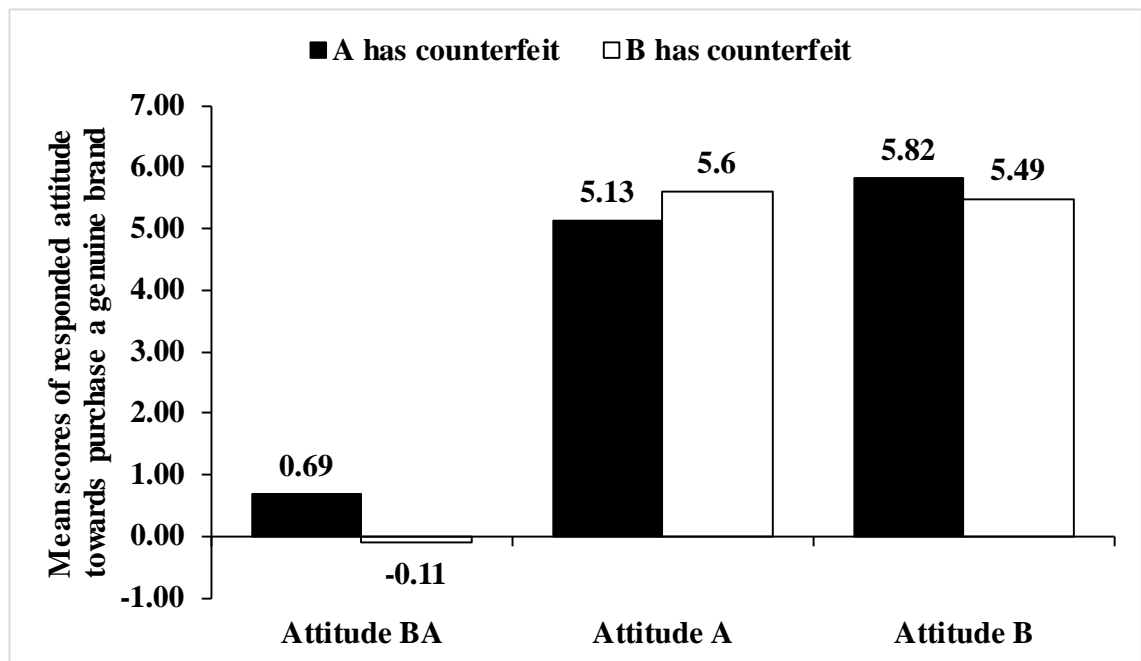


Figure 16. Mean scores of respondents' attitude toward a genuine brand in Study 2 conditions.

As shown in Figure 16, the respondents' attitude toward genuine brand B in the absence of a counterfeit (mean score  $M = 5.6$ ) was better than their attitude toward genuine brand A. In contrast, when genuine brand B had a counterfeit, its mean score ( $M = 5.49$ ) was worse than the attitude toward genuine brand A.

This suggests that the results of the binary logistic regression, chi-square test and ANOVA support Hypotheses 1b—that the existence of a counterfeit brand significantly

and negatively affects the evaluation of the genuine brand in Study 2, are similar to the results in Study 1. That is, information about an existing counterfeit significantly and negatively affects attitude toward a genuine brand, since respondents' attitude toward a genuine brand when it had no counterfeit was better than their attitude toward when it had a counterfeit, in the same way as in Study 1. Moreover, brand awareness did not affect consumer attitude toward a genuine brand.

## **5.6 Mediation Effect of Relevant Marketing Cues**

The current study included three mediation variables: beliefs regarding perceived quality, perceived exclusivity and perceived popularity. The following sections explain each intervening variable in more detail.

### **5.6.1 Perceived quality.**

A genuine brand's perceived quality affects attitudes toward the genuine brand when it has a counterfeit existing in the market (presence versus absence). The following section explains the perceived quality mediator in more detail.

#### **5.6.1.1 *Perceived genuine brand BA quality (mediatorBA\_quality).***

The perceived quality (meBA\_quality) variable indicated consumers' perceived quality of genuine brand BA when it had a counterfeit in the market—presence versus absence. This variable indicated perceived genuine brand B quality minus perceived genuine brand A quality, and was an original intervening variable developed by the current study. The perceived genuine brand BA quality variable presented the perceived genuine brand B quality data with a positive sign and the perceived genuine brand A quality data with a negative sign. This made observation of the perceived genuine brand quality easier; hence, the perceived genuine brand BA quality variable became the core perceived quality measurement through the data analysis process. An ANOVA test was conducted to analyse the effect of information about an existing counterfeit on the

perceived genuine brand BA quality mediator, following by a priori test. Table 9 displays the effect of information about an existing counterfeit on the perceived genuine brand BA quality cue in Study 2.

Table 9

*Effect of Existing Counterfeit on Perceived Quality BA of the Genuine Brand*

IV	Conditions	Mean	Std deviation	F	Sig.
IV_CFs	A has CFs	.7170	1.608	21.254	.000
	B has CFs	-.1810	1.183		
IV_brand	Known brand	.336	1.326	.388	.534
	Unknown brand	.205	1.617		
IV_CFs* IV_brand				4.781	.030

As can be seen from the table above, there was a significant main effect of information about a counterfeit existing in the market on consumers' perceived genuine brand BA quality in the known and unknown conditions ( $M_{A\_CFs} = .72$ ,  $SD = 1.61$ , versus  $M_{B\_CFs} = -.18$ ,  $SD = 1.18$ ;  $F(1,207) = 21.25$ ,  $p < .001$ ). Interestingly, in these data, there was a significant interaction effect between brand awareness and information about an existing counterfeit (presence versus absence) on consumers' perception of genuine brand BA quality in the known and unknown conditions ( $F(1,207) = 4.78$ ,  $p < .05$ ). However, there was no significant main effect of brand awareness on consumer perceptions of genuine brand BA quality in the known and unknown conditions ( $M_{A\_known} = .34$ ,  $SD = 1.33$ , versus  $M_{B\_unknown} = .21$ ,  $SD = 1.62$ ;  $F(1,207) = .39$ ,  $p > .10$ ) (see Figure 17 below).

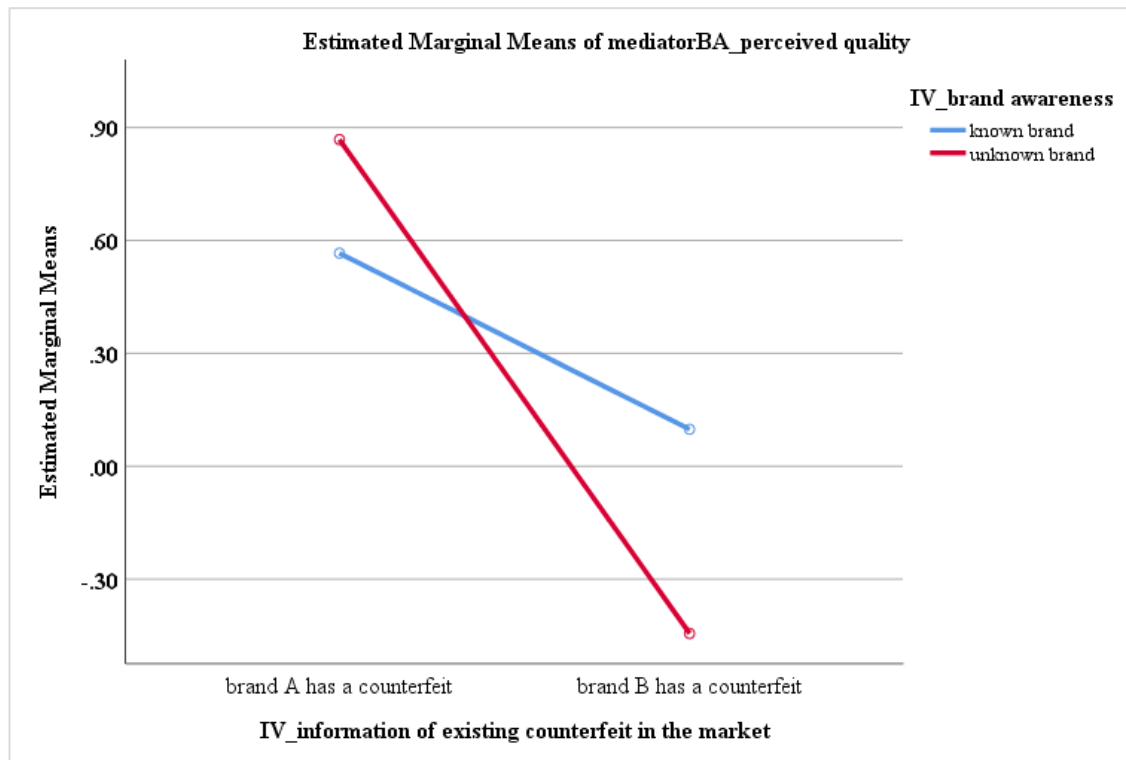


Figure 17. Interaction between information about an existing counterfeit and brand awareness.

As indicated graphically in Figure 17, there was a significant effect of the variable of information about an existing counterfeit in the market on consumers' perceived genuine brand BA quality, and a significant interaction effect between information about an existing counterfeit in the market and brand awareness on perceived quality of genuine brand BA. However, there was no significant mean effect of the variable of brand awareness on consumers' perceived quality of genuine brand BA.

To confirm the ANOVA data analysis, a planned contrast strategy was used to test a priori data, similar to that used for attitude BA. The results indicated a significant interaction of information about an existing counterfeit and brand awareness on consumer perceived quality BA of a genuine brand ( $F(1,207) = 4.78, p < .05$ ). The planned contrast confirmed the expectation. Specifically, the respondents in the



unknown brand condition were more likely to perceive the quality BA of genuine brand B when it did not have a counterfeit compared to genuine brand A ( $M_{A\_CFs} = .87$  versus  $M_{B\_CFs} = -.44$ ,  $F(1,207) = 23.434$ ,  $p < .001$ ), whereas respondents in the known brand condition showed marginally perceived quality of the genuine brand ( $M_{A\_CFs} = .57$  versus  $M_{B\_CFs} = .09$ ,  $F(1,207) = 2.896$ ,  $p < .10$ ).

Moreover, respondents in all conditions did not perceive a genuine brand quality that had a counterfeit, regardless of the brand awareness conditions. Respondents for genuine brand B with the absence of a counterfeit condition were more likely to perceive genuine brand B quality ( $M_{known\_brand} = .09$  versus  $M_{unknown\_brand} = -.44$ ,  $F(1,207) = 3.926$ ,  $p < .05$ ), whereas respondents for genuine brand B in the presence of a counterfeit condition were less likely to perceive genuine brand B quality ( $M_{known\_brand} = .57$  versus  $M_{unknown\_brand} = .87$ ,  $F(1,207) = 1.229$ ,  $p > .10$ ).

Respondents were more likely to perceive the quality of the genuine brand when it did not have a counterfeit existing in the market. Thus, an existing counterfeit significantly and negatively affected perceptions of the quality of the genuine brand.

#### **5.6.1.2 Perceived genuine brand A quality (mediatorA\_quality).**

The perceived quality (meA\_quality) variable indicated consumers' perceived genuine brand A quality when it had a counterfeit in the market—presence versus absence. ANOVA tests were used to analyse the effect of information about a counterfeit existing in the market on consumers' perceived genuine brand A quality. The ANOVA results showed a significant main effect of information about a counterfeit existing in the market on consumers' perceived genuine brand A quality in known and unknown conditions ( $M_{A\_CFs} = 5.13$ ,  $SD = 1.39$ , versus  $M_{B\_CFs} = 5.70$ ,  $SD = 1.12$ ;  $F(1,207) = 10.89$ ,  $p < .01$ ). However, there was no significant main effect of brand awareness on consumers' perceived genuine brand A quality ( $M_{known} = 5.53$ ,  $SD = 1.23$ ,

versus  $M_{\text{unknown}} = 5.31$ ,  $SD = 1.34$ ;  $F(1,207) = 1.73$ ,  $p > .10$ ). Likewise, there was no interaction effect between information about a counterfeit existing in the market and brand awareness on consumers' perceived genuine brand A quality ( $F(1,207) = 0.00$ ,  $p > .10$ ).

#### **5.6.1.3 Perceived genuine brand B quality (mediatorB\_quality).**

The perceived quality (meB\_quality) variable indicated consumers' perceived genuine brand B quality when it had a counterfeit in the market—presence versus absence. To analyse the effect of information about a counterfeit existing in the market on consumers' perceived genuine brand B quality in overall conditions, an ANOVA test was conducted. Interestingly, the ANOVA results revealed a significant main effect of information about a counterfeit existing in the market on consumers' perceived genuine brand B quality in known and unknown conditions ( $M_{A\_CFs} = 5.9$ ,  $SD = 1.2$ , versus  $M_{B\_CFs} = 5.52$ ,  $SD = 1.1$ ;  $F(1,207) = 11$ ,  $p < .05$ ). The more surprising result was the significant main effect of brand awareness on consumers' perceived genuine brand B quality in known and unknown conditions ( $M_{A\_known} = 5.9$ ,  $SD = 1.1$ , versus  $M_{B\_known} = 5.51$ ,  $SD = 1.21$ ;  $F(1,207) = 5.23$ ,  $p < .05$ ). The most surprising aspect of the data was the result that there was a significant interaction effect between brand awareness and information about an existing counterfeit (presence versus absence) on consumers' perceived genuine brand B quality in known and unknown conditions ( $F(1,207) = 7.74$ ,  $p < .01$ ). The results of the ANOVA analysis are presented in Figure 18 below.

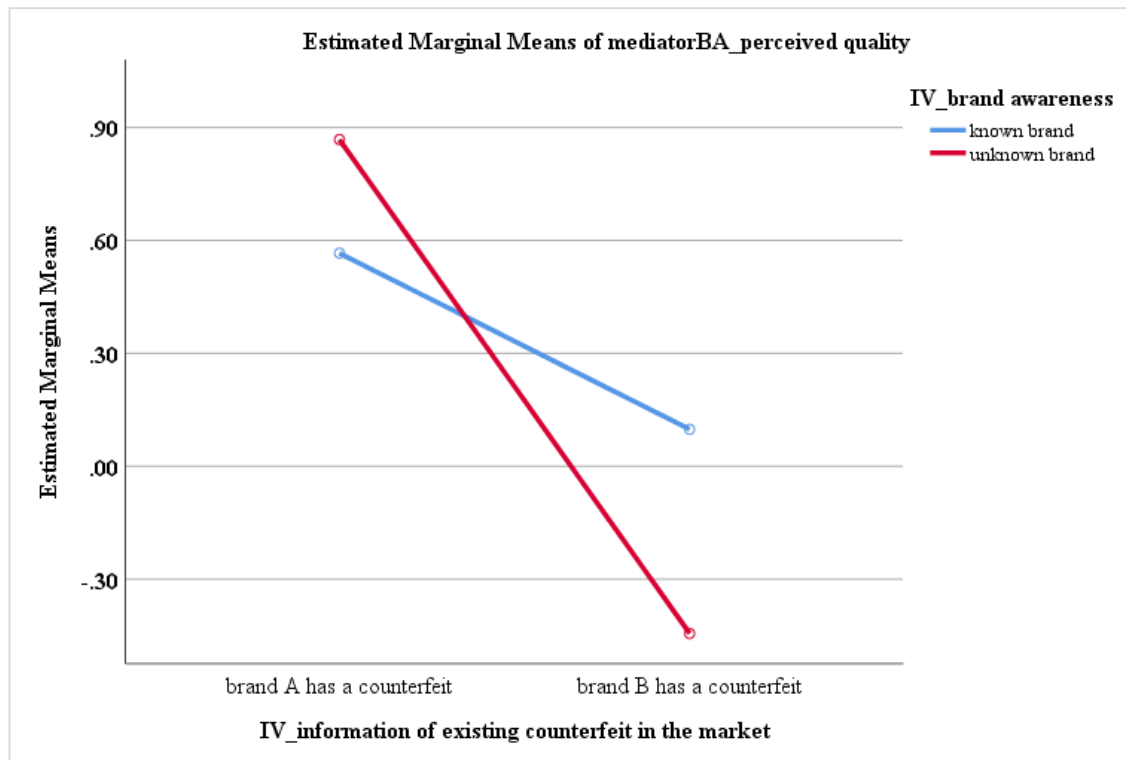


Figure 18. Interaction effect between presence versus absence of existing counterfeit and brand awareness on perceived genuine brand B quality.

From the data in Figure 18 above, it is apparent that there was a significant mean effect of the variable of information about an existing counterfeit in the market on consumers' perceived genuine brand quality, and a significant effect of the variable of brand awareness on consumers' perceived quality of genuine brand B. In addition, there was a significant interaction effect between information about an existing counterfeit in the market and brand awareness on the perceived quality of genuine brand B.

### 5.6.2 Overall results of perceived genuine brand quality.

The results of the ANOVA indicated that the perceived quality of the genuine brand in the absence of a counterfeit was better than the perceived quality in the presence of a counterfeit. Table 10 below presents a summary of the main characteristics of the overall perceived quality mediator.

Table 10

*Effect of Information about an Existing Counterfeit in the Market on Respondents'*

*Perceived Genuine Brand Quality Cue*

DV_perceived quality	IV_CFs	Mean	Std deviation	<i>F</i>	Sig.
Perceived quality BA	A has CFs	.7170	1.608	21.254	.000
	B has CFs	-.1810	1.183		
Perceived quality A	A has CFs	5.13	1.394	10.998	.001
	B has CFs	5.70	1.109		
Perceived quality B	A has CFs	5.85	1.194	4.243	.041
	B has CFs	5.52	1.075		

Table 10 compares and summarises the statistics for the overall perceived quality cue. When genuine brand A had a counterfeit existing in the market, the mean score for the perceived quality of genuine brand BA was better than when it didn't have a counterfeit existing in the market ( $M_{A\_CFs} = .72$ ,  $SD = 1.61$ , versus  $M_{B\_CFs} = -.18$ ,  $SD = 1.18$ ;  $F(1,207) = 21.25$ ,  $p < .001$ ). This results pattern was replicated across both perceived genuine brand A quality and perceived genuine brand B quality, as shown in Figure 19.

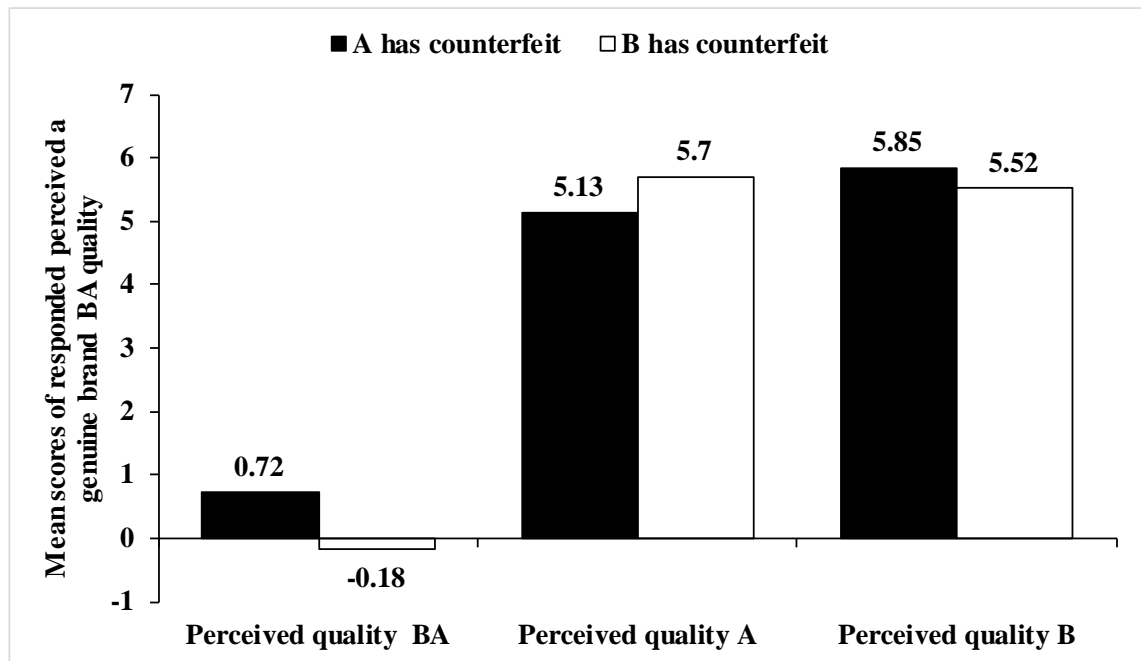


Figure 19. Mean scores of perceived quality mediator.

As shown in Figure 19, the respondents perceived a higher genuine brand B quality in the absence of a counterfeit (mean score  $M = 5.7$ ) than the genuine brand A quality with existence of counterfeit in the market. In contrast, when genuine brand B had a counterfeit, its mean score ( $M = 5.52$ ) was even worse than that for perceived genuine brand A quality. On average, the results of the ANOVA indicated that the presence of a genuine brand counterfeit significantly and negatively affected its perceived quality. In addition, there was an interaction effect between counterfeit and brand awareness on perceived genuine brand quality. However, there was no significant effect of brand awareness on perceived genuine brand quality.

### 5.6.3 Perceived exclusivity.

Perceived genuine brand exclusivity affected attitudes toward the genuine brand when it had a counterfeit existing in the market (presence versus absence). The following section explains the perceived exclusivity mediator in more detail.

### 5.6.3.1 Perceived genuine brand BA exclusivity (*mediatorBA\_exclusivity*).

The perceived exclusivity (meBA\_exclusivity) variable indicated consumers' perceived genuine brand BA exclusivity when it had a counterfeit in the market—presence versus absence. It derived from perceived genuine brand B exclusivity minus perceived genuine brand A exclusivity, and was an original intervening variable developed by the current study. The perceived genuine brand BA exclusivity variable presented the perceived genuine brand B exclusivity data with a positive sign and the perceived genuine brand A exclusivity data with a negative sign. This made observation of the perceived genuine brand exclusivity easier; therefore, the perceived genuine brand BA exclusivity variable became the core perceived exclusivity measurement through the data analysis process. An ANOVA test was conducted to analyse the effect of information about an existing counterfeit on the perceived genuine brand BA exclusivity mediator. Table 11 shows the effect of information about an existing counterfeit on the perceived exclusivity BA cue in Study 2.

Table 11

#### *Effect of Existing Counterfeit on the Perceived Exclusivity BA*

IV	Conditions	Mean	Std deviation	F	Sig.
IV_CFs	A has CFs	.915	1.789	33.179	.000
	B has CFs	-.523	1.824		
IV_brand	Known brand	.163	1.741	.129	.720
	Unknown brand	.233	2.126		
IV_CFs* IV_brand				.859	.355

As can be seen from the table above, there was a significant main effect of information about a counterfeit existing in the market on consumers' perceived genuine brand BA exclusivity in known and unknown conditions ( $M_{A\_CFs} = .92$ ,  $SD = 1.79$ ,

versus  $M_{B\_CFs} = -.52$ ,  $SD = 1.82$ ;  $F(1,207) = 33.18$ ,  $p < .001$ ). However, there was no significant main effect of brand awareness on consumers' perceived genuine brand BA exclusivity ( $M_{known} = .16$ ,  $SD = 1.74$ , versus  $M_{unknown} = .23$ ,  $SD = 2.13$ ;  $F(1,207) = .13$ ,  $p > .10$ ). Likewise, there was no interaction effect between information about a counterfeit existing in the market and brand awareness on consumers' perceived genuine brand BA exclusivity ( $F(1,207) = .86$ ,  $p > .10$ ).

To confirm the ANOVA data analysis, a planned contrast strategy was used to test a priori data in the same way as attitude BA. The results indicated an insignificant interaction of information about an existing counterfeit and brand awareness on consumers' perceived exclusivity BA of a genuine brand ( $F(1,207) = .86$ ,  $p > .10$ ), unlike with perceived quality. The planned contrast confirmed the expectation. Specifically, respondents in the unknown brand condition were more likely to perceive the exclusivity BA of genuine brand B when it did not have a counterfeit, rather than genuine brand A ( $M_{A\_CFs} = 1.08$  versus  $M_{B\_CFs} = -.59$ ,  $F(1,207) = 22.683$ ,  $p < .001$ ). Likewise, respondents in the known brand condition showed higher perceived exclusivity BA of genuine brand B ( $M_{A\_CFs} = .75$  versus  $M_{B\_CFs} = -.45$ ,  $F(1,207) = 11.515$ ,  $p < .01$ ).

Moreover, respondents in all conditions did not perceive genuine brand exclusivity in the presence of a counterfeit, regardless of the brand awareness condition. Respondents for genuine brand B in the absence of a counterfeit were more likely to perceive genuine brand B exclusivity ( $M_{known\_brand} = .75$  versus  $M_{unknown\_brand} = 1.08$ ,  $F(1,207) = .831$ ,  $p > .10$ ). Likewise, respondents for genuine brand B in the presence of a counterfeit were less likely to perceive genuine brand B exclusivity ( $M_{known\_brand} = -.45$  versus  $M_{unknown\_brand} = -.59$ ,  $F(1,207) = .160$ ,  $p > .10$ ).

### **5.6.3.2 Perceived genuine brand A exclusivity (mediatorA\_exclusivity).**

The perceived exclusivity (meA\_exclusive) variable indicated consumers' perceived genuine brand A exclusivity when it had a counterfeit in the market—presence versus absence. An ANOVA test was used to analyse the effect of information about a counterfeit existing in the market on consumers' perceived genuine brand A exclusivity. The ANOVA results indicated a significant main effect of information about a counterfeit existing in the market on consumers' perceived genuine brand A exclusivity in known and unknown conditions ( $M_{A\_CFs} = 4.43$ ,  $SD = 1.65$ , versus  $M_{B\_CFs} = 5.46$ ,  $SD = 1.44$ ;  $F(1,207) = 22.74$ ,  $p < .001$ ). However, there was no significant main effect of brand awareness on consumers' perceived genuine brand B exclusivity ( $M_{known} = 4.95$ ,  $SD = 1.60$ , versus  $M_{unknown} = 4.93$ ,  $SD = 1.66$ ;  $F(1,207) = .02$ ,  $p > .10$ ). Likewise, there was no interaction effect between information about a counterfeit existing in the market and brand awareness on consumers' perceived genuine brand B exclusivity ( $F(1,207) = .31$ ,  $p > .10$ ).

### **5.6.3.3 Perceived genuine brand B exclusivity (mediatorB\_exclusivity).**

The perceived exclusivity (meB\_exclusive) variable indicated consumers' perceived genuine brand B exclusivity when it had a counterfeit in the market—presence versus absence. To analyse the effect of information about a counterfeit existing in the market on consumers' perceived genuine brand B exclusivity in overall conditions, an ANOVA test was conducted. Interestingly, the ANOVA results revealed a marginally significant main effect of information about a counterfeit existing in the market on consumers' perceived genuine brand B exclusivity in known and unknown conditions, ( $M_{A\_CFs} = 5.35$ ,  $SD = 1.65$ , versus  $M_{B\_CFs} = 4.93$ ,  $SD = 1.48$ ;  $F(1,207) = 3.66$ ,  $p < .10$ ). However, there was no significant main effect of brand awareness on consumers' perceived genuine brand B exclusivity ( $M_{known} = 5.12$ ,  $SD = 1.59$ , versus  $M$



unknown = 5.17,  $SD = 1.57$ ;  $F(1,207) = .07$ ,  $p > .10$ ). Likewise, there was no interaction effect between information about a counterfeit existing in the market and brand awareness on consumers' perceived genuine brand B exclusivity ( $F(1,207) = .27$ ,  $p > .10$ ).

#### 5.6.3.4 Overall results of perceived genuine brand exclusivity.

The results of the ANOVA indicated that the perceived exclusivity of the genuine brand when it had no counterfeit was better than its perceived exclusivity when it had a counterfeit. Table 12 presents a summary of the main characteristics of the perceived exclusivity mediator.

Table 12

*Effect of Information about an Existing Counterfeit in the Market on Respondents'*

*Perceived Genuine Brand Exclusivity Cue*

DV_perceived exclusivity	IV_CFs	Mean	Std deviation	<i>F</i>	Sig.
Perceived exclusivity BA	A has CFs	.9151	1.789	33.179	.000
	B has CFs	-.5238	1.824		
Perceived exclusivity A	A has CFs	4.43	1.651	22.738	.000
	B has CFs	5.46	1.441		
Perceived exclusivity B	A has CFs	5.35	1.651	3.658	.057
	B has CFs	4.93	1.482		

Table 12 compares the summary statistics for the perceived exclusivity cue.

When genuine brand A had a counterfeit existing in the market, the perceived exclusivity genuine brand BA mean score was better than when it didn't have a counterfeit existing in the market ( $M_{A\_CFs} = .92$ ,  $SD = 1.79$ , versus  $M_{B\_CFs} = -.52$ ,  $SD = 1.82$ ;  $F(1,207) = 33.18$ ,  $p < .001$ ). This results pattern was replicated across both perceived genuine brand A exclusivity and perceived genuine brand B exclusivity, as shown in Figure 20 below.

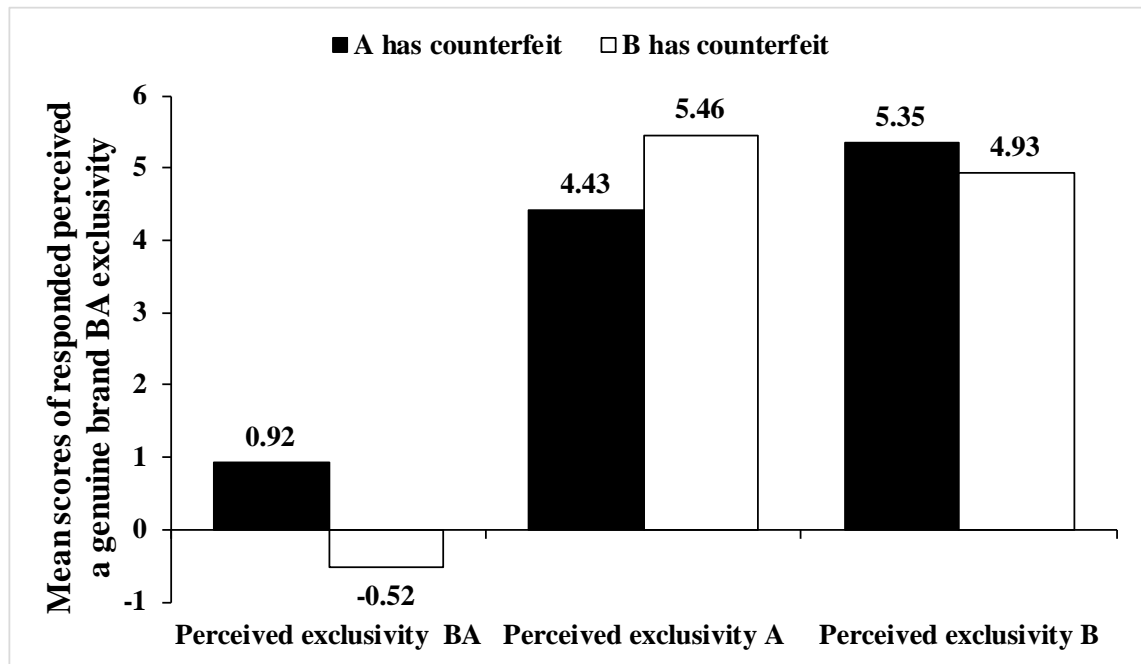


Figure 20. Mean scores of perceived exclusivity mediator.

As shown in Figure 20, the respondents' perceived genuine brand B exclusivity in the absence of a counterfeit had a better mean score ( $M = 5.46$ ) than did perceived genuine brand A exclusivity. In contrast, when genuine brand B had a counterfeit, its mean score ( $M = 4.93$ ) was even worse than that for perceived genuine brand A exclusivity. Thus, the results of the ANOVA indicated that the presence of a genuine brand counterfeit negatively affected its perceived exclusivity. However, there was no significant effect of brand awareness on perceived genuine brand exclusivity and no interaction effect between counterfeit (presence versus absence) and brand awareness on perceived genuine brand exclusivity.

#### 5.6.4 Perceived popularity.

Perceived genuine brand popularity affected attitudes toward a genuine brand when it had a counterfeit existing in the market (presence versus absence). The following section explains the perceived popularity mediator in more detail.

#### 5.6.4.1 Perceived genuine brand BA popularity (mediatorBA\_popularity).

The perceived popularity (meBA\_popularity) variable indicated consumers' perceived genuine brand BA popularity when it had a counterfeit in the market—presence versus absence. It derived from perceived genuine brand B popularity minus perceived genuine brand A popularity, and was an original intervening variable developed by the current study. The perceived genuine brand BA popularity variable presented the perceived genuine brand B popularity data with a positive sign and the perceived genuine brand A popularity data with a negative sign. This made observation of the perceived genuine brand popularity easier; therefore, the perceived genuine brand BA popularity variable became the core perceived popularity measurement through the data analysis process. An ANOVA test was conducted to analyse the effect of information about an existing counterfeit on the perceived genuine brand popularity BA mediator—see Table 13.

Table 13

*Effect of Information about an Existing Counterfeit on the Perceived Popularity BA Cue*

IV	Conditions	Mean	Std deviation	F	Sig.
IV_CFs	A has CFs	.518	1.616	3.701	.056
	B has CFs	.095	1.535		
IV_brand	Known brand	.538	1.314	4.341	.038
	Unknown brand	.084	1.791		
IV_CFs* IV_brand				.594	.442

As can be seen from the table above, there was a marginally significant main effect of information about a counterfeit existing in the market on consumers' perceived genuine brand BA popularity in known and unknown conditions ( $M_{A\_CFs} = .52$ ,  $SD = 1.62$ , versus  $M_{B\_CFs} = .09$ ,  $SD = 1.54$ ;  $F(1,207) = 3.70$ ,  $p < .10$ ). However, there was no significant main effect of brand awareness on consumers' perceived genuine brand BA

popularity in known and unknown conditions ( $M_{A\_known} = .54$ ,  $SD = 1.31$ , versus  $M_{B\_unknown} = .08$ ,  $SD = 1.79$ ;  $F(1,207) = 4.34$ ,  $p > .10$ ). Likewise, there was no significant interaction effect between brand awareness and information about an existing counterfeit (presence versus absence) on consumers' perceived genuine brand BA popularity in known and unknown conditions ( $F(1,207) = .59$ ,  $p > .10$ ).

#### **5.6.4.2 A priori test for perceived genuine brand BA popularity.**

To confirm the ANOVA data analysis, a planned contrast strategy was used to test a priori data, similar to that used for attitude BA. The results indicated an insignificant interaction of information about an existing counterfeit and brand awareness on consumers' perceived popularity BA of a genuine brand ( $F(1,207) = .59$ ,  $p > .10$ ), in the same manner as perceived exclusivity, and unlike perceived quality. The planned contrast confirmed the expectation. Specifically, respondents in the unknown brand condition were more likely to marginally perceive the popularity BA of genuine brand B when it did not have a counterfeit, rather than genuine brand A ( $M_{A\_CFs} = .38$  versus  $M_{B\_CFs} = -.20$ ,  $F(1,207) = 3.684$ ,  $p < .10$ ), whereas respondents in the known brand condition showed higher perceived popularity BA of genuine brand B ( $M_{A\_CFs} = .66$  versus  $M_{B\_CFs} = .41$ ,  $F(1,207) = .655$ ,  $p > .10$ ).

Moreover, respondents in all conditions did not perceive genuine brand popularity in the presence of a counterfeit, regardless of the brand awareness conditions. Specifically, respondents for genuine brand B in the presence of a counterfeit were more likely to perceive genuine brand B popularity ( $M_{known\_brand} = .41$  versus  $M_{unknown\_brand} = -.20$ ,  $F(1,207) = 4.053$ ,  $p < .05$ ), whereas respondents for genuine brand B in the absence of a counterfeit were less likely to perceive genuine brand B popularity ( $M_{known\_brand} = .66$  versus  $M_{unknown\_brand} = .38$ ,  $F(1,207) = .866$ ,  $p > .10$ ).

#### **5.6.4.3 Perceived genuine brand A popularity (mediatorA\_popularity).**

The perceived popularity (meA\_popular) variable indicated consumers' perceived genuine brand A popularity when it had a counterfeit in the market—presence versus absence. An ANOVA test was used to analyse the effect of information about a counterfeit existing in the market on consumers' perceived genuine brand A popularity. The ANOVA results showed a significant main effect of information about a counterfeit existing in the market on consumers' perceived genuine brand A popularity in known and unknown conditions ( $M_{A\_CFs} = 5.21$ ,  $SD = 1.47$ , versus  $M_{B\_CFs} = 5.58$ ,  $SD = 1.18$ ;  $F(1,207) = 4.22$ ,  $p < .05$ ). However, there was no significant main effect of brand awareness on consumers' perceived genuine brand A popularity in known and unknown conditions when consumers perceived genuine brand A popularity ( $M_{A\_known} = 5.45$ ,  $SD = 1.19$ , versus  $M_{B\_unknown} = 5.34$ ,  $SD = 1.47$ ;  $F(1,207) = .43$ ,  $p > .10$ ). Likewise, there was no significant interaction effect between brand awareness and information about an existing counterfeit (presence versus absence) on consumers' perceived genuine brand A popularity in known and unknown conditions when consumers perceived genuine brand A popularity ( $F(1,207) = .44$ ,  $p > .10$ ).

#### **5.6.4.4 Perceived genuine brand B popularity (mediatorB\_popularity).**

The perceived popularity (meB\_popular) variable indicated consumers' perceived genuine brand B popularity when it had a counterfeit in the market—presence versus absence. To analyse the effect of information about a counterfeit existing in the market on consumers' perceived genuine brand B popularity in overall conditions, an ANOVA test was conducted. Interestingly, the ANOVA results revealed a significant main effect of brand awareness on consumers' perceived genuine brand B popularity in known and unknown conditions ( $M_{A\_known} = 5.99$ ,  $SD = 1.20$ , versus  $M_{B\_unknown} = 5.42$ ,  $SD = 1.33$ ;  $F(1,207) = 10.75$ ,  $p < .01$ ). However, there was no significant main effect of

brand awareness on consumers' perceived genuine brand B popularity in known and unknown conditions ( $M_{A\_known} = 5.73$ ,  $SD = 1.36$ , versus  $M_{B\_unknown} = 5.68$ ,  $SD = 1.24$ ;  $F(1,207) = .48$ ,  $p > .10$ ). Likewise, there was no significant interaction effect between brand awareness and information about an existing counterfeit (presence versus absence) on consumers' perceived genuine brand B popularity in known and unknown conditions ( $F(1,207) = 2.73$ ,  $p > .10$ ).

#### 5.6.4.5 Overall results of perceived genuine brand popularity.

The results of the ANOVA indicated that the perceived popularity of the genuine brand in the absence of a counterfeit was better than its perceived popularity in the presence of a counterfeit. Table 14 presents a summary of the main characteristics of the perceived popularity BA mediator.

Table 14

*Effect of Information about an Existing Counterfeit in the Market on Respondents'*

*Perceived Genuine Brand Popularity BA Cue*

DV_perceived popularity	IV_CFs	Mean	Std deviation	<i>F</i>	Sig.
Perceived popularity BA	A has CFs	.5189	1.616	3.701	.056
	B has CFs	.0952	1.535		
Perceived popularity A	A has CFs	5.21	1.465	4.219	.041
	B has CFs	5.58	1.175		
Perceived popularity B	A has CFs	5.73	1.356	.048	.828
	B has CFs	5.68	1.236		

Table 14 compares the summary statistics for the perceived popularity cue. When genuine brand A had a counterfeit existing in the market, the perceived popularity genuine brand BA mean score was better than when it had a counterfeit existing in the market ( $M_{A\_CFs} = .52$ ,  $SD = 1.62$ , versus  $M_{B\_CFs} = .09$ ,  $SD = 1.54$ ;  $F(1,207) = 3.70$ ,  $p < .10$ ). This results pattern was replicated across both perceived genuine brand A popularity and perceived genuine brand B popularity, as shown in Figure 21.

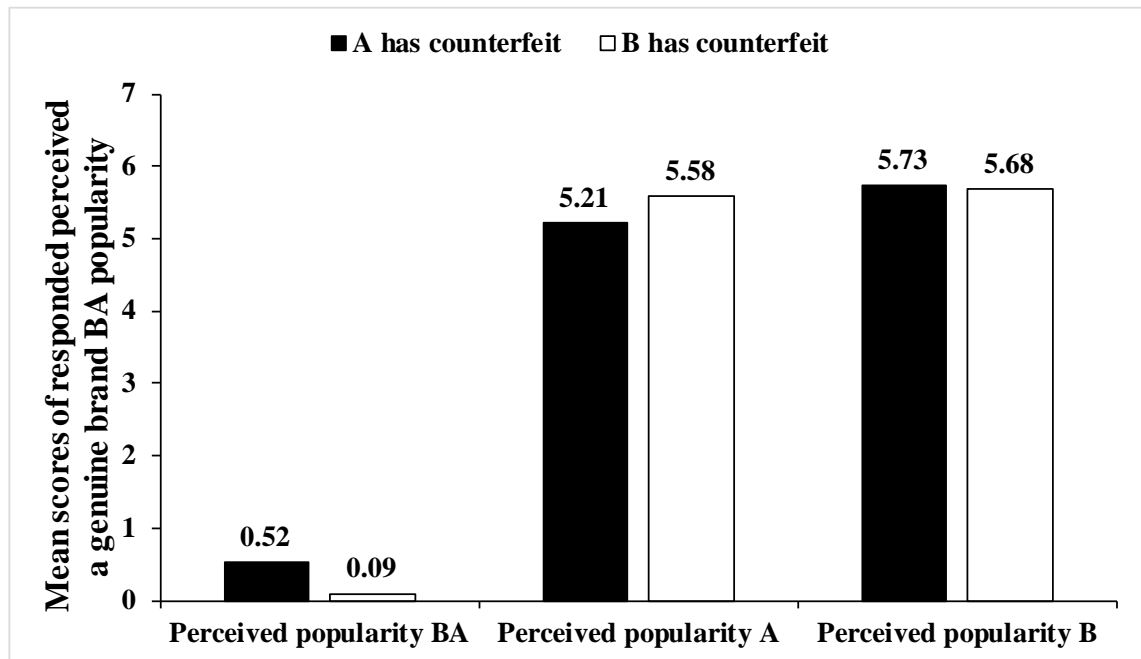


Figure 21. Mean scores of perceived popularity mediator.

As shown in Figure 21, the respondents' perceived genuine brand B popularity in the absence of a counterfeit had a higher mean score ( $M = 5.58$ ) than did perceived genuine brand A popularity. In contrast, when genuine brand B had a counterfeit, its mean score ( $M = 5.68$ ) was less than that for perceived genuine brand A popularity. Hence, the results of the ANOVA indicated that the presence of a genuine brand counterfeit negatively affected its perceived popularity. In addition, there was a significant effect of brand awareness on perceived genuine brand popularity. However, there was no interaction effect between counterfeit (presence versus absence) and brand awareness on perceived genuine brand popularity.

#### 5.6.5 Overall effect of presence versus absence of counterfeit on mediators.

Perceived quality, perceived exclusivity and perceived popularity were affected by an existing counterfeit in the market. Table 15 compares the results obtained from

the ANOVA analysis of the perceived quality, perceived exclusivity and perceived popularity BA mediator.

Table 15

*Effect of Information about an Existing Counterfeit in the Market on Respondents'*

*Perceived Genuine Brand Quality, Exclusivity and Popularity*

DV_mediators	IV_CFs	Mean	Std deviation	<i>F</i>	Sig.
Perceived quality BA	A has CFs	0.72	1.608	21.254	.000
	B has CFs	-0.18	1.183		
Perceived exclusivity BA	A has CFs	0.92	1.789	33.179	.000
	B has CFs	-0.52	1.824		
Perceived popularity BA	A has CFs	0.52	1.616	3.701	.056
	B has CFs	0.09	1.535		

It can be seen from the data in Table 15 that, in the absence of a counterfeit for genuine brand B, the respondents reported significantly higher quality, exclusivity and popularity than in the presence of a counterfeit. For perceived quality BA, perceived genuine brand B quality had a mean score of  $M = 0.72$  when its counterfeit was absent, which was higher than the score for perceived genuine brand A quality. In contrast, perceived genuine brand B quality had a mean score of  $M = -0.18$  when its counterfeit was present, which was less than the score for perceived genuine brand A quality. The experiment results pattern was replicated across both perceived exclusivity and perceived popularity, as shown in Figure 22.



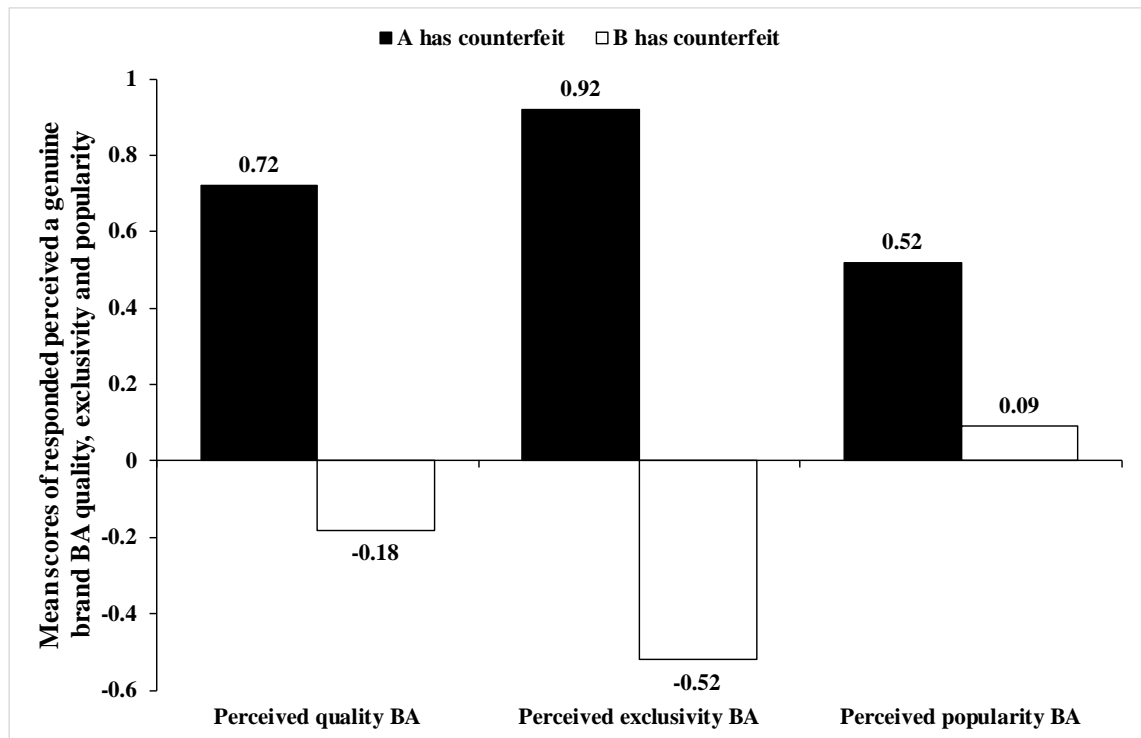


Figure 22. Mean scores of the research mediators.

Figure 22 shows a clear trend of increasing perceived quality, perceived exclusivity and perceived popularity of genuine brand B in the absence of a counterfeit in the market, and decreasing perceived quality, perceived exclusivity and perceived popularity of genuine brand B when it has a counterfeit in the market. The mean score for perceived genuine brand BA quality was  $M_{BA\_perceived\_quality} = .72$  when brand B had no counterfeit, which was better than the mean score for perceived genuine brand BA quality ( $M_{BA\_perceived\_quality} = -.18$ ) when genuine brand B had a counterfeit existing in the market. Similarly, the mean score for perceived genuine brand BA exclusivity was  $M_{BA\_perceived\_exclusivity} = .92$  when genuine brand B had no counterfeit, which was better than the mean score for perceived genuine brand BA exclusivity ( $M_{BA\_perceived\_exclusivity} = -.52$ ) when genuine brand B had a counterfeit existing in the market. Likewise, the mean score for perceived genuine brand BA popularity was  $M_{BA\_perceived\_popularity} = .52$  when genuine brand B had no counterfeit, which was better than the mean score for perceived

genuine brand B popularity ( $M_{BA\_perceived\_popularity} = .09$ ) when genuine brand B had a counterfeit existing in the market. Interestingly, the data from Table 15 and Figure 21 indicate that perceived exclusivity was the mediator variable most affected by (the presence versus absence of) a counterfeit, following by perceived quality, and then perceived popularity. Table 16 provides an overview of the ANOVA results.

Table 16

*Overview of Effects of Information about Existing Counterfeit and Brand Awareness on All Mediators*

	Perceived quality	Perceived exclusivity	Perceived popularity
Information about existing counterfeit (IV_CFs)	Significant	Significant	Significant
Brand awareness (IV_brand awareness)	Not significant	Not significant	Significant
IV_CFs * IV_brand awareness	Significant	Not significant	Not significant

Interestingly, Table 16 indicates that information about an existing counterfeit affected all mediators significantly. Moreover, the interaction between information about an existing counterfeit and brand awareness only affected perceived quality, while brand awareness only affected perceived popularity.

## 5.7 Mediation Analysis

As a further check, to verify whether perceived quality, perceived exclusivity and perceived popularity had a significant mediating role on consumers' attitude toward a genuine brand, based on Preacher and Hayes (2008), a multiple mediation analysis was conducted. This study employed 5,000 bootstrapped samples with Preacher and Hayes's SPSS macro module #4. Similar to Chernev (2004) and Larson and Billeter (2013), the attitude BA toward a genuine brand was the dependent variable in all conditions. The independent variable was the experiment conditions: A has counterfeits = 1 versus B has counterfeits = 2. The three mediators were perceived quality, perceived exclusivity and perceived popularity.

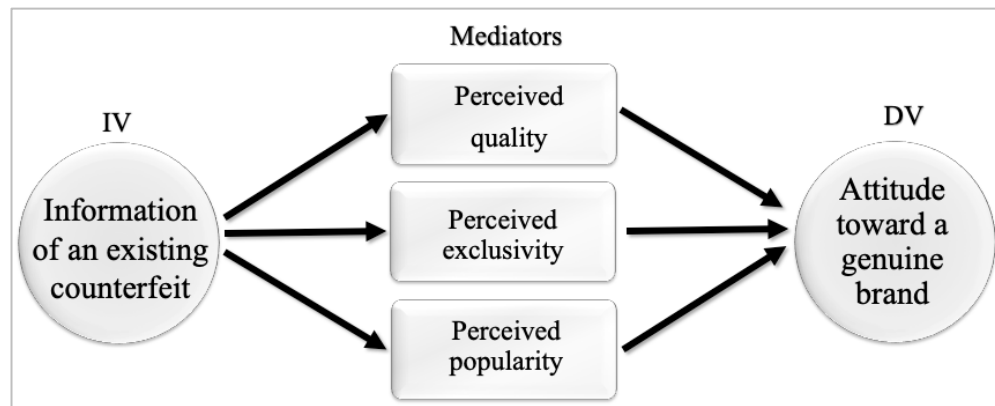
For overall brand awareness (see Appendix M), the result indicated a significant indirect effect for the perceived quality, perceived exclusivity and perceived popularity mediators:

- perceived quality—95% bootstrap confidence interval (CI): -.5028, -.1295
- perceived exclusivity—95% bootstrap CI: -.6161, -.1942
- perceived popularity—95% bootstrap CI: -.2379, -.0016.

Perceived quality, perceived exclusivity and perceived popularity mediated the effect of information about a counterfeit in the market on attitude in the overall brand awareness groups. The results supported Hypotheses 2—that perceived quality, perceived exclusivity and perceived popularity mediate the effect of the existence of a counterfeit on consumers' evaluation of the genuine brand.

Corresponding results in the unknown brand condition (see Appendix N) indicated a significant indirect effect for perceived quality (95% bootstrap CI: -.7121, -.0203), perceived exclusivity (95% bootstrap CI: -.8568, -.1685) and perceived popularity (95% bootstrap CI: -.4548, .0261). Perceived quality, perceived exclusivity

and perceived popularity mediated the effect of information about a counterfeit in the market on attitude in the unknown condition. Figure 23 illustrates the mediation effect of perceived quality, perceived exclusivity and perceived popularity in the overall brand awareness and unknown brand condition.



*Figure 23.* Indirect effect of perceived quality, exclusivity and popularity cues for evaluating an unknown genuine brand with a counterfeit in the market.

In contrast, in the known brand condition (see Appendix O), this analysis revealed a significant indirect effect of information about a counterfeit in the market (presence versus absence) through only perceived quality (95% bootstrap CI: -.4960, .0113) and perceived exclusivity (95% bootstrap CI: -.5643, -.0621), and not through perceived popularity (95% bootstrap CI: -.1500, .0499). Hence, perceived quality and perceived exclusivity mediated the effect of information about a counterfeit in the market on attitude toward the genuine brand, while perceived popularity did not, in the known condition (see Figure 24).

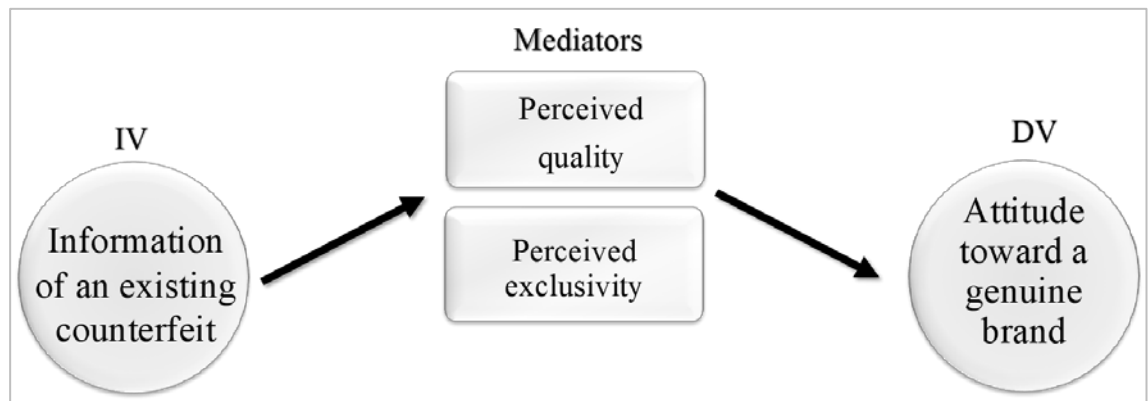


Figure 24. Indirect effect of perceived quality and exclusivity cues for evaluating a known genuine brand with a counterfeit in the market.

## 5.8 Further Testing (Naïve Theory Measurement)

For naïve theory measurement, similar to that used in Study 1, the respondents in all conditions were asked to rate the following statement: ‘Good products usually are...’. They could select from: 1 = ‘very popular’ and ‘everybody can afford them’ on the left side, and 7 = ‘very exclusive’ and ‘only selected people can buy them’ on the right side of a seven-point bipolar scale. The results indicated that the majority of respondents (64.2%, 113/211) believed that the genuine brand was of high quality if it was exclusive (mean score:  $M = 4.38$ ,  $SD = 1.84$ ), while 78.9% (131/211) indicated that the genuine brand was of high quality if only selected people could purchase it (mean score:  $M = 4.91$ ,  $SD = 1.55$ ). Thus, the results were the same as the first study results.

### 5.8.1 Beliefs regarding existing counterfeit (counterfeit versus no counterfeit in the market).

The respondents in all conditions were then asked to rate the following statement: ‘Good products usually are...’. They could select from: 1 = ‘has counterfeits in the market’ and 7 = ‘does not have counterfeits in the market’, on a seven-point bipolar scale. The majority of respondents (62.9%, 100/211) believed that the genuine brand was of high quality if it had counterfeits in the market (mean score:  $M = 3.62$ ,  $SD$

= 1.76). This result was also the same as the first study result, with the existence of a counterfeit affecting the perceived genuine brand quality value.

## **5.9 Discussion for Study 2**

The respondents were aware of the similar price for the two genuine products (\$1,500), as indicated by the manipulation check results, thus there was no confusion regarding whether the brand with counterfeits in the market was itself a counterfeit or genuine. In addition, the consumers remembered the products' cost, which was an important element to know whether they could afford to purchase the product or not, and some consumers perceive high quality if a product has a high price. There was a significant effect from information about an existing counterfeit on participants' brand selection when they were unfamiliar with the brand.

Despite the respondents' awareness of the originality of the brands, the majority chose not to purchase the genuine brand that had a counterfeit in the market. The Study 2 results indicated that the existence of a counterfeit significantly changed consumers' attitudes toward a genuine brand, regardless of whether they knew the brand. In other words, knowing the brand (known versus unknown) did not affect the relationship between information about a counterfeit in the market and attitude and choice toward the genuine brand.

Information about an existing counterfeit significantly affected perceived exclusivity, following by perceived quality, and then perceived popularity. In other words, the presence of a counterfeit affected perceived genuine brand exclusivity, quality and popularity significantly and negatively. Respondents were more likely to show higher perceived quality, exclusivity and popularity of the genuine brand in the absence of a counterfeit than in the presence of a counterfeit, regardless of brand awareness.

Brand awareness only affected perceived popularity because when respondents did not know the genuine brand, they were more likely to show higher perceived popularity, regardless of the counterfeit availability. There was only an interaction effect between information about an existing counterfeit and brand awareness on perceived quality. When the genuine brand had no counterfeit, respondents were more likely to have a higher perceived quality of genuine brand B when they knew the brand than when they did not know the brand. In addition, when they knew the genuine brand, they were more likely to have a higher perceived quality of the genuine brand in the absence of a counterfeit than in the presence of a counterfeit.

Beliefs regarding perceived quality, perceived exclusivity and perceived popularity were a significant marketing tool cue because, in both overall conditions, they mediated the relationship between information about a counterfeit in the market and attitude toward the genuine brand and unknown brand conditions. However, only perceived quality and perceived exclusivity mediated the relationship between information about a counterfeit in the market and attitude toward the genuine brand. Perceived popularity did not mediate this relationship because the known brand was already popular.

More consumers believe that the high-quality genuine brands are exclusive than those who believe that the high-quality genuine brands are popular; however, there were consumers who believed that the high-quality genuine brands would have counterfeits in the market.

## **5.10 Conclusion to Study 2**

In the manipulation check, the respondents remembered the survey genuine brand price. The respondents were familiar with the known brand and unfamiliar with the unknown brand.

The results of Study 2 supported the research hypothesis. First, they supported Hypothesis 1b—that the existence of a counterfeit affected the evaluation of the genuine brand negatively, which also confirmed the results of Study 1. In addition, the mediation analysis results supported Hypothesis 2—that perceived quality, perceived exclusivity and perceived popularity mediate the evaluation of the genuine brand when it has a counterfeit existing in the market.

The experiment was realistic because the information about an existing counterfeit in the market affected the respondents' attitudes toward the genuine brand. When genuine brand A had a counterfeit, Cronbach's  $\alpha = .93$ , and when brand B had a counterfeit, Cronbach's  $\alpha = .94$ . Moreover, the results of the binary logistic regression, chi-square test and ANOVA indicated the validity of the experiment and supported Hypothesis 1b—that the existence of a counterfeit brand negatively affected the evaluation of the genuine brand. Further, the mediation analysis results indicated the validity of the experiment and supported Hypothesis 2—that perceived quality, perceived exclusivity and perceived popularity mediate the effect of the existence of a counterfeit on the evaluation of the genuine brand.



## **Chapter 6: Conclusion**

This part of the thesis discusses the findings that emerged from the statistical analysis presented in the previous chapters. It begins with a general discussion of the research findings, followed by this research's theoretical and practical contributions to the marketing field. The final section of this conclusion discusses the research limitations, and provides recommendations for future research directions.

### **6.1 General Discussion of Research Findings**

As mentioned in the literature review, it is clear that counterfeiting is a pervasive unethical global market phenomenon that influences consumers, businesses and industries. Prior studies have noted important insights regarding the effects of counterfeit products on consumers' evaluation of genuine brands (Amar et al., 2018; Amaral & Loken, 2016; Commuri, 2009; Van Horen & Pieters, 2012; Wilcox, Vallen, et al., 2009) and that the positive and negative aspects of counterfeiting depend on the particular context (Eisend & Schuchert-Güler, 2006). However, very little was found in the literature on the first question of the current study, which sought to determine the effect of counterfeit products on genuine brands. Thus, an initial objective of the research was to identify the effects of counterfeit products on genuine brands, and provide knowledge of the positive (versus negative) effects of counterfeit products on genuine brands.

This study began with the aim of assessing the importance of the existence of counterfeit products in consumers' evaluation of genuine brands. The second question in this research considered whether perceived quality, exclusivity and popularity cues explain the effect of counterfeits on the genuine brand. The study was designed to determine the effect of consumers' beliefs regarding perceived quality, exclusivity and popularity cues on the relationship between information about an existing counterfeit

and consumers' attitude toward a genuine brand. The literature has reported a strong relationship between the perceived quality, exclusivity and popularity cues on the relationship between information about an existing counterfeit and consumers' attitude toward a genuine brand. However, in reviewing the literature, few data were found on the association between information about an existing counterfeit and consumers' choice to purchase a genuine brand and their attitude toward a genuine brand.

The most interesting finding in the current study was that the existence of a counterfeit of a genuine brand negatively affects the evaluation of the genuine brand. Through comparing both studies' results, it can be seen that information about an existing counterfeit of a genuine brand was found to cause rejection of the purchase of the genuine brand. This finding agrees with Evangelidis and Van Osselaer's (2018) findings, which indicated that consumers will choose to purchase a brand that does not have a counterfeit existing in the market over a brand with a counterfeit on a common attribute. Moreover, these results are consistent with Ojiaku and Osarenkhoe (2018), who suggested that customers with negative past experiences of purchasing a counterfeit are unlikely to purchase a brand with counterfeits in the market because they are concerned that the product they purchase might be a counterfeit, rather than an original, given that those customers' past experience relates significantly and negatively to brand choice. Another possible explanation for the choice not to purchase a genuine brand with a counterfeit in the market is that the efficacy of products perceived to be counterfeits and that of genuine products resembling them are degraded by moral disgust toward counterfeiting, as suggested by Romani et al. (2012), and consumers perceiving the brand as a counterfeit of the genuine brand lowers the efficacy of the genuine version of the same brand, as found by Amar et al. (2018). A further explanation that consumers when not purchasing a genuine brand which has an existing

counterfeit in the market, still experience pleasure at being envied, and pleasure in distinguishing themselves, as noted by Romani et al. (2012). It was interesting to note that in all conditions of Study 1, the results did not indicate any significant gender effect on consumers' choice to purchase a genuine brand, nor the attitude toward a genuine brand when it had a counterfeit existing in the market. This result corroborates the ideas of Friedmann and Lowengart (2018), who suggested that in a brand selection context, there is generally corresponding acquisition for males and females, and Clodfelter and Fowler (2001), who found no significant differences between gender in evaluating genuine brand quality. However, it contrasts with the research by Kurt, Inman, and Argo (2011) and Winterich, Mittal, and Ross Jr (2009), who suggested that males have been found to place more emphasis on the self, whereas females have been found to concentrate more on social interpersonal relationships. Further, Steinhart et al. (2014) suggested that gender identity might not only interact with product type, but also with the naïve theories of popularity and exclusivity.

Although there was no gender influence on the evaluation of a genuine brand when it had an existing counterfeit in the market, it is possible to hypothesise that these conditions were less likely to occur under other demographic elements, such as civil status, level of education, social role, socioeconomic status, ethnic group and age. Correspondingly there was a dramatic observation in Study 2 conditions that the results did not demonstrate any significant brand awareness effect on consumers' choice to purchase a genuine brand, or attitude toward a genuine brand, when it had a counterfeit existing in the market. Nevertheless, these results were unlike Evangelidis and Van Osselaer (2018), who suggested that brand awareness has an effect on consumers' choice to purchase a genuine brand and attitude toward a genuine brand when it has a counterfeit in the market, especially when consumers have no strong expectations about

the common brand attributes, which means they do not know the brand. The current study results also differ from Romani et al. (2012), who suggested that the presence of a counterfeit of a genuine brand leads to evaluating the genuine brand positively for well-known brands by acting on all three dimensions: individual, social and functional.

Given that brand awareness did not influence consumers' evaluation of the genuine brand when it had a counterfeit existing in the market in the current study, it is possible that brand loyalty and brand love also does not have a similar effect. Hence, it could conceivably be hypothesised that brand equity would not influence consumers' evaluation of a genuine brand when it has a counterfeit existing in the market. Consequently, in general, it seems that the existence of a counterfeit of a genuine brand does not affect the consumer–brand relationship.

Another important finding in Study 2 was that perceived quality, perceived exclusivity and perceived popularity mediated the relationship between information about a counterfeit in the market (presence versus absence) and attitude toward the genuine brand in the overall brand awareness context, especially when consumers did not know the genuine brand. In contrast, only perceived quality and perceived exclusivity mediated the effect of information about a counterfeit in the market on attitude when consumers knew the genuine brand. Perceived popularity did not have a mediating effect because the genuine brand was already popular. It seems that these results arose because perceived exclusivity is a positive cue to functional products, as suggested by Steinhart et al. (2014), because consumers wish to purchase a genuine brand that is exclusive and of high quality, as suggested by Berger and Heath (2007). Additionally the purchase of exclusive genuine brands is enhanced when few people own such products, as examined by Becker (1991) and Berger and Heath (2008). However, there are other possible explanations for the perceived exclusivity cue, that is

perceived exclusivity is the more significant cue for perceived genuine brand quality. when consumers know or do not know the genuine brand. This was explained by the fact that consumers have a desire to experience pleasure at being envied and pleasure in distinguishing themselves when they acquire the genuine brand, as discussed in Romani et al. (2012). This finding, although preliminary, suggests that pleasure at being envied and pleasure in distinguishing oneself could be a major factor causing perceived genuine brand quality when the brand is exclusive. Further research should be undertaken to investigate how this situation occurs. These results also agree with the findings of other studies in which consumers perceived genuine brand quality if the brand was popular, as described by Berger and Heath (2007, 2008), Deval et al. (2013), Hellofs and Jacobson (1999) and Yu et al. (2018), who found that perceived quality mediated the effect of popularity cues on attitude toward the brand under certain conditions.

In both studies of the current research, the results indicated that, for naïve theory measurement, consumers perceived the genuine brand to have higher quality if it was exclusive, rather than if it was popular, and if only selected people could afford it, rather than if everybody could afford it, corresponding to the ideas suggested by Becker (1991) and Berger and Heath (2007, 2008). Moreover, the existing counterfeit of a genuine brand was found to cause the belief that the perceived quality of the genuine brand is unchanged. This finding typically supports the idea of Deval et al. (2013), who suggested that information that a product is widely available serves as a cue of its theories of societies. This also supports Steinhart et al. (2014) and Wu and Lee (2016), who compared popularity cues with exclusivity cues. The current experiment was successful because it was able to identify the effect of an existing counterfeit on the

genuine brand in terms of consumers' evaluation of the genuine brand and the roles of perceived quality, exclusivity and popularity in such an evaluation.

## **6.2 Theoretical and Practice Contribution**

The present study makes several noteworthy contributions to the understanding of counterfeiting's consequences and the counterfeit consumption literature by suggesting the implications of existing counterfeits on genuine brands. The results of this research have theoretical implications, as the research shows that a counterfeit of a genuine brand negatively changes consumers' evaluations of the brand. This means that consumers prefer to purchase a genuine brand which does not have a counterfeit existing in the market. It also influences their attitude toward the genuine brands even when the genuine brand is known or is a luxury item. Therefore, this will affect the known or luxury genuine brands markets negatively in terms of their sales, revenues and profits. Amar et al. (2018) found that the perceived possibility the product is a counterfeit of the genuine brand lowers the genuine brand's efficacy. This finding also contributes to existing knowledge that an existing counterfeit acts as a negative cue to reduce the demand for the genuine product. This is in contrast to the findings of Nia and Zaichkowsky (2000), who found that the existence of counterfeits does not negatively affect consumers' purchase intentions of the genuine brands, and that the satisfaction, status and value of genuine brand names are not reduced by the widespread availability of counterfeits.

The empirical findings in this study provide a new theoretical understanding of perceived genuine brand quality, as this is the first time that brand awareness has been used to explore the role of perceived quality, perceived exclusivity and perceived popularity as marketing cues in the evaluation of a genuine brand. That is, consumers perceived the known genuine brand's quality based on its exclusivity, and perceived the

genuine brand's quality based on its exclusivity and popularity even compared to unknown brands.

This study provides another theoretical contribution—that gender has no role in explaining the consumer behaviour of purchasing a genuine brand when it has a counterfeit existing in the market, as gender does not affect the decision of the buyer to purchase. The existence of a counterfeit product affects both male and female consumers' evaluations of the original brand, and leads them to choose not to purchase a genuine brand that has a counterfeit in the market. That is, both males and females prefer to purchase a genuine brand that does not have a counterfeit in the market.

This study's analysis of the effect of an existing counterfeit in the market on consumers' evaluation of the genuine brand has extended knowledge that genuine brand awareness does not affect consumers' evaluation of the genuine brand when it has an existing counterfeit in the market. An existing counterfeit affects consumers' attitude toward the genuine brand and causes a preference for purchasing a genuine brand that does not have a counterfeit, in both cases when consumers know or do not know the brand. For this reason, brand awareness has no role in explaining the consumer behaviour of purchasing a genuine brand when it has a counterfeit existing in the market, as it does not affect the decisions of the buyer to purchase. These findings enhance understanding regarding brand awareness by indicating that there is a significant effect of an existing counterfeit on consumers' choice to purchase a genuine brand when they are unfamiliar with the brand.

This work contributes to existing knowledge regarding counterfeits by providing empirical evidence that beliefs regarding perceived quality, perceived exclusivity and perceived popularity are strong marketing tools that act as cues to mediate the effect of an existing counterfeit on the evaluation of the genuine brand.

This research also has several practical applications. The study has introduced some ways toward enhancing marketers' understanding of both their target and potential consumer segments, so they can carefully choose appropriate marketing strategies that will be more profitable for genuine brands. The current study has detailed the importance of consumers' beliefs when they evaluate a genuine brand and the process of their purchase decision making. For known genuine brands, consumers believe that a high-quality brand is exclusive. In contrast, for unknown genuine brands, some consumers believe that a high-quality brand is exclusive, while others believe that a high-quality brand is popular. This suggests that marketers should fully understand their target consumers' typologies, as suggested by Herstein et al. (2015), and characteristics, as suggested by Cheung and Prendergast (2006), whether they are true-buyers or fake-buyers, as examined by Khandeparkar and Motiani (2018), and whether they are individualistic consumers or collectivistic consumers, as examined by Xiao, Li, and Peng (2018).

Another practical implication for both unknown and known genuine brand managers is that they should benefit from the fact that the popularity of a brand is not the only reason that consumers purchase the brand. Rather, consumers also consider a brand's quality and function value. However, known brand managers should focus more on the exclusivity features of their brands, since counterfeiting benefits from the genuine brand's equity and popularity, not from exclusivity. They should also enhance the affordability of the popular brand, since this increases sales revenue to balance the economy scale that in turn will lead to the customers who consume the counterfeit to also desire to obtain the genuine brand to experience its authentic quality. Thus, to reduce counterfeiting demand and raise genuine brand market growth, managers and



marketers should emphasise exclusive quality, function, packaging and brand value, while known brand managers should offer products at affordable prices.

A further practical implication of this study is that the negative effects of purchasing the existing counterfeit of the genuine brand affects society, markets and economy, and this provides increased knowledge for policy makers and marketers.

### **6.3 Limitations and Recommendations for Future Research Directions**

The current study has several limitations. This study used scenario-based experiments with manipulation conditions related to knowing about the existence of a counterfeit of a genuine brand in the market to examine the effect of a counterfeit on consumers' evaluation of the genuine brand. The effect of this information would likely be stronger if it was replicated in a real choice. It is empirically and theoretically significant to examine the influence of an existing counterfeit in a real choice setting to determine the process of evaluating a genuine brand when it has a counterfeit in the market. Also, future research should use the decoy effect (Park & Kim, 2005) to examine the positive effect of the counterfeit on the genuine brand. It could introduce a third factor to the experiment (show the participants the counterfeit version existing in the market) to make the genuine brand option more attractive for them than the counterfeit option.

This study examined the effect of an existing counterfeit on general attitudes. Future studies could explore whether an existing counterfeit of a genuine brand has a different effect on hedonic attitude and utilitarian attitude. Future research could also explore whether different forms of existing counterfeits (cheap and low-quality counterfeits versus superior-quality counterfeits) have an equal effect on consumers' evaluation of the genuine brand.

This type of research required examination of a large population sample because the area of study affects many people in society. Many people have used counterfeit products. However, it was not possible to gather views from everybody who has used counterfeit products. It was also not possible to reach all the respondents because of limited time and costs. Consequently, use of appropriate sampling techniques was required. In addition, in responding to questionnaires, some people could be influenced

by social cues and provide biased information. Another problem that could arise from the sample is certain individuals not having specific demand patterns. These individuals blindly use products without knowing whether they are genuine or counterfeit—perhaps through lack of knowledge. The responses from such kinds of people cannot be relied on. However, this can be avoided by familiarising the respondents with the aim of the research and encouraging them to provide genuine information. This research focused on the effects of counterfeit products. Accordingly, future research could focus on the extent to which counterfeit products affect genuine brands.

From this research, it is evident that counterfeit products have a negative effect on genuine brands. When counterfeit products are of low quality and do not satisfy the needs of consumers, the consumers will tend to seek genuine products. It is also evident that some types of counterfeit products can be used to increase brand awareness of less-known brands in the market. For instance, handbags with a trademark of Florence will help increase the awareness of the brand, since people only see the brand name and do not have the opportunity to ascertain the product quality. This study also found that some people wish to have or use products that are unique and expensive. Genuine brands are always unique and priced high because of their high quality.

While previous research has focused on the relationship between counterfeit products and genuine products, limited research has considered the effect of counterfeit products on consumers. Thus, future research could focus on the effect of counterfeit products on consumers. Moreover, future research could collect empirical data using a qualitative method. This method would be effective in describing complicated situations that could provide knowledge, support and especially emotional understanding of the research.

## 6.4 Conclusion

To meet the purpose of the research—to provide knowledge regarding the effect of the existing counterfeit on the evaluation of the genuine brand and to guide marketing managers in their efforts to diminish consumer demand for counterfeits by enhancing the consumers' preferences for the genuine brand —the following conclusions are drawn.

Existing counterfeits affect the evaluation of the genuine brand significantly and negatively because consumers have a negative attitude toward a genuine brand which has an existing counterfeit in the market and choose not to purchase it whether they know or do not know the brand. Moreover, existing counterfeits in the market can improve perceived quality, perceived exclusivity and perceived popularity of genuine brands when consumers do not know the genuine brand. When the consumers know the genuine brand existing counterfeits can only improve perceived quality and perceived exclusivity but not perceived popularity. In other words, an existing counterfeit led consumers to judge the unknown genuine brand as high quality, exclusive and popular and to judge the known genuine brand as high quality and exclusive only because it is already popular. Therefore, the availability of the counterfeit affects the evaluation of the genuine brand significantly and negatively and also enhances consumers' preferences for the genuine brand by enhancing the judgement of the genuine brand as high quality, exclusive and popular when they do not know the brand, and enhancing the judgement of the genuine brand as high quality and exclusive when the brand awareness is available.

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## Appendix A. Variables Driven the Non- deceptive Consumption of the Counterfeit Products

Table A. Variables Driven the Non- deceptive Consumption of the Counterfeit Products

Themes	Emotion			Inter-Personal			Luxury brand influence							Situation				Social			
	Schadenfreude	Pleasure	Experience reasons for	Moral intensity	Individuals' self-view	Susceptibility to interpersonal	Value the prestige associated with	The scarcity of the original	Ephemerality of the brand	Product involvement	Product knowledge	Brand image	Brand personality	Brand prominence	Mood	Counterfeiting awareness	Face consciousness	bought the counterfeits before	Buying situation	Culture context	Social motivation
Scholars																					
(Grossman & Shapiro, 1988)							✓														
(Ang et al., 2001)																		✓			✓
(Cushman et al., 2006)				✓													✓				
(Eisend & Schuchert-Güler, 2006)			✓					✓							✓						
(Greene & Paxton, 2009)				✓																	
(Wilcox, Kim, et al., 2009)				✓																	✓

Themes															
	Emotion			Inter-Personal			Luxury brand influence					Situation			Social
	Schadenfreude	Pleasure	Experience reasons for	Moral intensity	willingness	Individuals' self-view	Susceptibility to interpersonal	Value the prestige associated with	The scarcity of the original	Ephemerality of the brand	Product involvement	Product knowledge	Brand image	Brand personality	Brand prominence
Scholars															✓
											✓	✓	✓	✓	
								✓	✓						
					✓										
														✓	✓
									✓	✓				✓	
				✓		✓	✓								
															✓

Themes	Emotion	Inter-Personal	Luxury brand influence	Situation	Social
	Experience reasons for Pleasure Schadenfreude	Value the prestige associated with Susceptibility to interpersonal Individuals' self-view willingness Moral intensity	Brand prominence Brand personality Brand image Product knowledge Product involvement Ephemerality of the brand The scarcity of the original	Buying situation bought the counterfeits before Face consciousness Counterfeiting awareness Mood	Social motivation Culture context
Scholars					
(Baghi et al., 2016)				✓	
(Bian et al., 2016)		✓			
(Koklic et al., 2016)		✓			
(Martinez & Jaeger, 2016)		✓			
(Marticotte & Arcand, 2017)	✓	✓			
(Pueschel et al., 2017)		✓			





## Appendix B. Non- deceptive Counterfeit Consumption Risk for Consumers' Behaviour and emotion

Table B. Non- deceptive Counterfeit Consumption Risk for Consumers' Behaviour and emotion

Scholars	Consumer behaviour risk				Emotional risk				
	Human risk	Unbundle the status	Associated with a counterfeit label	Judging others as unethical	Behaving dishonestly	Feeling embarrassment	Feeling shame	The impact on personality	Feeling less authentic
(Grossman & Shapiro, 1988)		✓	✓						
(Newton et al., 2006)	✓								
(Eisend & Schuchert-Güler, 2006)					✓				
(Jackson, 2009)	✓								
(Gino et al., 2010)				✓	✓		✓		✓
(Hieke, 2010)									
(Anthony et al., 2012)	✓								
(Riquelme et al., 2012)	✓								

Scholars	Consumer behaviour risk				Emotional risk				
	Human risk	Unbundle the status	Associated with a counterfeit label	Judging others as unethical	Behaving dishonestly	Feeling embarrassment	Feeling shame	The impact on personality	Feeling less authentic
(Holden & Book, 2012)								✓	
(Nwankwo et al., 2014)									
(Tang et al., 2014)									
(Bian et al., 2016)					✓	✓			
(Pueschel et al., 2017)					✓			✓	

## Appendix C. Interpersonal factors reducing non- deceptive counterfeit consumption

Table C. Interpersonal factors reducing non- deceptive counterfeit consumption

Scholars	Moral believes	Ethical policy	Cognitive dissonance	Self-protection	Self-view	Face consciousness	Behave honestly	Increase guilt feeling	Increase genuine brand marketing factors (manufacturing factors)	Intervention	Accountability type
(Zhang & Mittal, 2005)											✓
(Greene & Paxton, 2009)							✓				
(Kim et al., 2012)	✓										
(Chen et al., 2014)						✓					
(Kim et al., 2014)					✓						

Accountability type											
Intervention											
Increase genuine brand marketing factors (manufacturing factors)								✓			
Increase guilt feeling								✓			
Behave honestly											
Face consciousness											
Self-view											
Self-protection				✓							
Cognitive dissonance											
Ethical policy									✓		
Moral believes											
Scholars											
(Jeong & Koo, 2015)								✓			
(Baghi et al., 2016)				✓							
(Jiang & Shan, 2016)									✓		
(Martinez & Jaeger, 2016)											
(Pueschel et al., 2017)	✓			✓							

## Appendix D. Ethical Approval and Information Sheet



### Auckland University of Technology Ethics Committee (AUTEC)

Auckland University of Technology  
D-88, Private Bag 92006, Auckland 1142, NZ  
T: +64 9 921 9999 ext. 8316  
E: [ethics@aut.ac.nz](mailto:ethics@aut.ac.nz)  
[www.aut.ac.nz/researchethics](http://www.aut.ac.nz/researchethics)

11 June 2018  
Jungkeun Kim  
Faculty of Business Economics and Law  
Dear Jungkeun

Re Ethics Application: **18/226 What is the Effect of the Existence of a Counterfeit on the genuine brand?**

Thank you for providing evidence as requested, which satisfies the points raised by the Auckland University of Technology Ethics Committee (AUTEC).

Your ethics application has been approved for three years until 11 June 2021.

#### Non-Standard Conditions of Approval

1. Alteration of the reference to withdrawing 'before the investigation becomes comprehensive' to make it clear that once the survey has been submitted, the anonymous nature of the research means that the data cannot be withdrawn.

Non-standard conditions must be completed before commencing your study. Non-standard conditions do not need to be submitted to or reviewed by AUTEC before commencing your study.

#### Standard Conditions of Approval

1. A progress report is due annually on the anniversary of the approval date, using form EA2, which is available online through <http://www.aut.ac.nz/researchethics>.
2. A final report is due at the expiration of the approval period, or, upon completion of project, using form EA3, which is available online through <http://www.aut.ac.nz/researchethics>.
3. Any amendments to the project must be approved by AUTEC prior to being implemented. Amendments can be requested using the EA2 form: <http://www.aut.ac.nz/researchethics>.
4. Any serious or unexpected adverse events must be reported to AUTEC Secretariat as a matter of priority.
5. Any unforeseen events that might affect continued ethical acceptability of the project should also be reported to the AUTEC Secretariat as a matter of priority.

Please quote the application number and title on all future correspondence related to this project.

AUTEC grants ethical approval only. If you require management approval for access for your research from another institution or organisation then you are responsible for obtaining it. You are reminded that it is your responsibility to ensure that the spelling and grammar of documents being provided to participants or external organisations is of a high standard.

For any enquiries, please contact [ethics@aut.ac.nz](mailto:ethics@aut.ac.nz)

Yours sincerely,

Kate O'Connor  
Executive Manager  
Auckland University of Technology Ethics Committee

Cc: , [pcj8222@aut.ac.nz](mailto:pcj8222@aut.ac.nz)



## **Participant Information Sheet**

### **Date Information Sheet Produced:**

22/05/2018

### **Project Title**

What is the Effect of the Existence of a Counterfeit on the genuine brand?

#### **An Invitation**

My name is Taghreed Bahai. I am a postgraduate student in the School of Marketing, Advertising and Sales at Auckland University of Technology. I invite you to participate in my research, "What is the Effect of the Existence of a Counterfeit on the genuine brand?" This research will contribute as partial credit towards the completion of my Master of Business qualification. Your participation in this research is entirely voluntary. Personal information of the participants is discreet and therefore will not be collected during the research. The participants will be anonymous since no personal knowledge of the participants will be obtained including their locations and IP addresses. The researcher will not have any information regarding anyone who has participated in the research. Due to the anonymity of people who participated in the study, any information provided by the participants cannot be withdrawn after the survey is finished.

### **What is the purpose of this research?**

This research seeks to show the effects of a counterfeit on the genuine brand, and to show the mediating role of a perceived quality, perceived exclusivity and perceived popularity cues. Is there a significant effect of the counterfeit product on the genuine brand? How and why are consumers' preferences for the genuine brand enhanced when the counterfeit products of the brand are (as opposed to when they are not) available in the market? Also, does a perceived quality, perceived exclusivity and perceived popularity cues explain the effect of counterfeits on the original, genuine brand?

### **How was I identified and why am I being invited to participate in this research?**

Vetting of the appropriate participants for this study has been done through Amazon Mechanical Turk. You have been invited to participate in this research since you have registered through and been verified by Amazon Mechanical Turk. Therefore, only individuals above 18 years old are allowed to participate in the study. People who take part in the survey should be citizens of the United States. You are exposed to our survey invitation since you are part of the Amazon Mechanical Turk Panel.

### **How do I agree to participate in this research?**

Your participation in this research is voluntary (it is your choice) and whether you choose to participate will neither advantage nor disadvantage you. Active participation in the survey means that you agree to take part in the research. Personal information will not be collected regarding the participants. The researcher will not be able to connect any information provided during the survey to the individual participant who gave the information. The researcher will not have any knowledge regarding anyone who has taken part in the study. Information provided by participants cannot be excluded from the survey once the survey is complete. Participants who wish to withdraw their information should do so before the investigation becomes comprehensive.

### **What will happen in this research?**

The research involves about five minutes of responding to an online survey. You will be asked to read the instructions and respond to each question. Consent for participation in this research will be completion of the survey questionnaire.

### **What are the discomforts and risks?**

Minimal discomfort or risk is expected for any participant as identities will be kept anonymous. All care will be taken to protect your privacy and the commercial sensitivity of information given. Risk may be perceived as the time that is given up completing the three to five-minute survey.

### **How will these discomforts and risks be alleviated?**

If you do not feel comfortable during the research, you may discontinue involvement in this research at any time. Participants are advised to answer each question as honestly as possible. However, you do not have to provide a response if you feel that you are not comfortable with the question. Your questionnaire will also indicate that you should only answer the questions that you feel comfortable tackling. The survey is not mandatory, and therefore there will be no consequences for omitting a particular item. Additionally, failure to answer a specific question for personal reasons will not have significant effects on the final score of the participant from the survey.

### **What are the benefits?**

This research might add to theoretical knowledge about the effect of counterfeit products on genuine brands. Participants might enjoy the opportunity to participate in an academic research project which will contribute to my Master of Business qualification.

### **What opportunity do I have to consider this invitation?**

You will be given three weeks to consider this invitation.

### **Will I receive feedback on the results of this research?**

We will send you a synopsis of the results at your request. So, if you want to find out the results of this research, please send an email to Jungkeun Kim, [jkkim@aut.ac.nz](mailto:jkkim@aut.ac.nz).

### **What do I do if I have concerns about this research?**

Any concerns regarding the nature of this project should be notified in the first instance to the Project Supervisor, Dr Jungkeun Kim, email: [jungkeun.kim@aut.ac.nz](mailto:jungkeun.kim@aut.ac.nz), phone: +64 9 921 9999 ext. 5091.

Concerns regarding the conduct of the research should be notified to the Executive Secretary of AUTEC, Kate O'Connor, [ethics@aut.ac.nz](mailto:ethics@aut.ac.nz), 921 9999 ext. 6038.

### **Whom do I contact for further information about this research?**

Please keep this Information Sheet and a copy of the Consent Form for your future reference. You are also able to contact the research team as follows:

#### ***Researcher Contact Details:***

Taghreed Bahai, email: [pcj8222@autuni.ac.nz](mailto:pcj8222@autuni.ac.nz), phone: +64 21 058 9061.

#### ***Project Supervisor Contact Details:***

Dr Jungkeun Kim, email: [jungkeun.kim@aut.ac.nz](mailto:jungkeun.kim@aut.ac.nz), phone: +64 9 921 9999 ext.5091.

Approved by the Auckland University of Technology Ethics Committee on *type the date final ethics approval was granted*,  
AUTEC Reference number *type the reference number*.



# Appendix E. Survey of Study 1

Start of Block: Gender

Q1 What is your gender?

- ☐ Male
- ☐ Female

End of Block: Gender

Start of Block: Control\_Male

Your Preference Regarding Handbags

Please read the information given below about the two brands and answer the following questions.

Imagine that you are going to buy a business bag at this moment. You find two of the latest luxury exclusive collections: a GOSTO and a FORTUNATO. Both are Italian genuine calf leather, handmade by local designers.

GOSTO	FORTUNATO
	
Company's key products: Handbags, wallets, sheepskin boots, jewelry, hats and gloves.	Company's key products: Handbags, wallets, bamboo sunglasses, belts, hats and scarves.

Start of Block: CFs\_A\_Male

Your Preference Regarding Handbags

Please read the information given below about the two brands and answer the following questions.

Imagine that you are going to buy a business bag at this moment. You find two of the latest luxury exclusive collections: a GOSTO and a FORTUNATO. Both are Italian genuine calf leather, handmade by local designers.

GOSTO	FORTUNATO
	
Company's key products:  Handbags, wallets, sheepskin boots, jewelry, hats and gloves.	Company's key products:  Handbags, wallets, bamboo sunglasses, belts, hats and scarves.
Counterfeits exist in the market.	No counterfeits exist in the market.

Start of Block: CFs\_B\_Male

Your Preference Regarding Handbags

Please read the information given below about the two brands and answer the following questions.

Imagine that you are going to buy a business bag at this moment. You find two of the latest luxury exclusive collections: a GOSTO and a FORTUNATO. Both are Italian genuine calf leather, handmade by local designers.

GOSTO	FORTUNATO
	
Company's key products:  Handbags, wallets, sheepskin boots, jewelry, hats and gloves.	Company's key products:  Handbags, wallets, bamboo sunglasses, belts, hats and scarves.
No counterfeits exist in the market.	Counterfeits exist in the market.



Q1 Which brand would you choose?

- ☐ Gosto
- ☐ Fortunato

---

Q2 Please rate the brand "Gosto".

	1	2	3	4	5	6	7	
Very bad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very good
Very unfavorable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very favorable
Very unattractive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very attractive

---

Q3 Please rate the brand "Fortunato".

	1	2	3	4	5	6	7	
Very bad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very good
Very unfavorable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very favorable
Very unattractive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very attractive

---

End of Condition\_Male

Start of Block: Control\_Female

Your Preference Regarding Handbags

Please read the information given below about the two brands and answer the following questions.

Imagine that you are going to buy a fashion handbag at this moment. You find two of the latest luxury exclusive collections: a GIULIA and a FLORENCE. Both are Italian genuine calf leather, handmade by local designers.

GIULIA	FLORENCE
	
Company's key products: Handbags, wallets, sheepskin boots, jewelry, hats and gloves.	Company's key products: Handbags, wallets, bamboo sunglasses, belts, hats and scarves.

Start of Block: CFs\_A\_Female

Your Preference Regarding Handbags

Please read the information given below about the two brands and answer the following questions.

Imagine that you are going to buy a fashion handbag at this moment. You find two of the latest luxury exclusive collections: a GIULIA and a FLORENCE. Both are Italian genuine calf leather, handmade by local designers.

GIULIA	FLORENCE
	
Company's key products: Handbags, wallets, sheepskin boots, jewelry, hats and gloves.	Company's key products: Handbags, wallets, bamboo sunglasses, belts, hats and scarves.
Counterfeits exist in the market.	No counterfeits exist in the market.

Your Preference Regarding Handbags

Please read the information given below about the two brands and answer the following questions.

Imagine that you are going to buy a fashion handbag at this moment. You find two of the latest luxury exclusive collections: a GIULIA and a FLORENCE. Both are Italian genuine calf leather, handmade by local designers.

GIULIA	FLORENCE
	
Company's key products: Handbags, wallets, sheepskin boots, jewelry, hats and gloves.	Company's key products: Handbags, wallets, bamboo sunglasses, belts, hats and scarves.
No counterfeits exist in the market.	Counterfeits exist in the market.

Q1 Which brand would you choose?

- ☐ Giulia
- ☐ Florence

Q2 Please rate the brand "Giulia".

	1	2	3	4	5	6	7	
Very bad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very good
Very unfavorable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very favorable
Very unattractive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very attractive

Q3 Please rate the brand "Florence".

	1	2	3	4	5	6	7	
Very bad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very good
Very unfavorable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very favorable
Very unattractive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very attractive

End of condition\_female

Start of Block: Naïve theory measurement

Q4 Please rate the following statements.

"Good products usually are...."

	1	2	3	4	5	6	7	
Very popular.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very exclusive
Everybody loves them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Only selected people can buy them

" Good products usually are..."

	1	2	3	4	5	6	7	
Have counterfeits in the market.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Do not have counterfeits in the market

End of Block: Naïve theory measurement

Start of Block: Manipulation

Q7 What was the price of bags above?

- ☐ \$500
- ☐ \$1,000
- ☐ \$1,500
- ☐ \$2,000
- ☐ \$2,500
- 

Q8 Are you familiar with brand Fendi?

- ☐ Yes
- ☐ No
- 

Q9 Are you familiar with brand Gucci?

- ☐ Yes
- ☐ No
- 

Q10 Are you familiar with brand Valextra?

- ☐ Yes
- ☐ No
- 

Q11 Are you familiar with brand Del Giudice?

- ☐ Yes
- ☐ No
- 

Q12 Generally, how much do you like "Fendi" brand?

- Not at all ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ Very much
-



Q13 Generally, how much do you like "Gucci" brand?

Not at all ☐ ☐ ☐ ☐ ☐ ☐ ☐ Very much

---

Q14 Generally, how much do you like "Valextra" brand?

Not at all ☐ ☐ ☐ ☐ ☐ ☐ ☐ Very much

---

Q15 Generally, how much do you like "Del Giudice" brand?

Not at all ☐ ☐ ☐ ☐ ☐ ☐ ☐ Very much

End of Block: Manipulation

Start of Block: Demographic

Q5 what is your civil status?

- ☐ Married
  - ☐ Widowed
  - ☐ Divorced
  - ☐ Separated
  - ☐ Single (Never married)
- 

Q6 What is your highest education degree?

- ☐ Less than high school
- ☐ High school graduate
- ☐ Some college
- ☐ Bachelor/Undergraduate
- ☐ Master/Postgraduate
- ☐ Doctorate/PhD
- ☐ Other \_\_\_\_\_

Q7 Which of the following is most appropriate to describe your social roles?

- ☐ Employed full time
  - ☐ Employed part time
  - ☐ Unemployed looking for work
  - ☐ Unemployed not looking for work
  - ☐ Retired
  - ☐ Student
- 

Q8 Please select your Socioeconomic status (average net income level per year).

- ☐ Less than \$10,000
  - ☐ \$10,000 - \$19,999
  - ☐ \$20,000 - \$29,999
  - ☐ \$30,000 - \$39,999
  - ☐ \$40,000 - \$49,999
  - ☐ \$50,000 - \$59,999
  - ☐ \$60,000 - \$69,999
  - ☐ \$70,000 - \$79,999
  - ☐ \$80,000 - \$89,999
  - ☐ \$90,000 - \$99,999
  - ☐ \$100,000 - \$149,999
  - ☐ More than \$150,000
- 

Q9 What is your age?

---

End of Block: Demographic

---

## Appendix F. The relationship between the information of an existing counterfeit and gender in Study 1

Table F. Variables in the Equation by Binary-Logistic Regression Test in Study 1

Variables in the Equation		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 <sup>a</sup>	IV_gender(1)	-.051	.657	.006	1	.938	.950
	IV_CF			11.645	2	.003	
	IV_CF (1)	1.623	.631	6.608	1	.010	5.067
	IV_CF (2)	2.123	.631	11.327	1	.001	8.360
	IV_CF * IV_gender			.361	2	.835	
	IV_CF(1) by IV_gender(1)	-.354	.834	.180	1	.671	.702
	IV_CF(2) by IV_gender(1)	.051	.821	.004	1	.950	1.053
	Constant	-1.335	.503	7.055	1	.008	.263

a. Variable(s) entered on step 1: IV\_gender, IV\_CF, IV\_CF \* IV\_gender.

CF (1): Control condition; CF (2): Counterfeit condition

## Appendix G. The effect of counterfeit information (on one brand condition) on consumer choice in Study 1

**Table G1. Crosstabulation IV\_CF \* DV\_choice \* IV\_gender**

			Which brand would you choose?				
IV_gender			Gosto		Fortunato		Total
Males	IV_CF	control	18	52.9%	16	47.1%	34
		A_CFs	15	31.3%	33	68.8%	48
		B_CFs	28	80.0%	7	20.0%	35
	Total		61		56		117
			Giulia		Florence		Total
Females	IV_CF	control	12	42.9%	16	57.1%	28
		A_CFs	10	31.3%	22	68.8%	32
		B_CFs	19	79.2%	5	20.8%	24
	Total		41		43		84
			Brand A		Brand B		Total
Males and females	IV_CF	control	30	48.4%	32	51.6%	62
		A_CFs	25	31.3%	55	68.8%	80
		B_CFs	47	79.7%	12	20.3%	59
	Total		102	50.7%	99	49.3%	201

**Table G2. Chi-Square Test, DV\_ Choice regardless gender**

		Value	df	Asymptotic Significance (2-sided)
Control and counterfeit conditions	Pearson Chi-Square	32.040 <sup>a</sup>	2	.000
	Likelihood Ratio	33.743	2	.000
	Linear-by-Linear Association	11.292	1	.001
	N of Valid Cases	201		
Control condition and brand B has a counterfeit	Pearson Chi-Square	4.323 <sup>b</sup>	1	.038
	Likelihood Ratio	4.321	1	.038
	Linear-by-Linear Association	4.292	1	.038
	N of Valid Cases	142		
Control condition and brand A has a counterfeit	Pearson Chi-Square	12.778 <sup>c</sup>	1	.000
	Likelihood Ratio	13.143	1	.000
	Linear-by-Linear Association	12.672	1	.000
	N of Valid Cases	121		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 29.06.

b. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 24.01.

c. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 21.45.

## Appendix H. The effect of counterfeit information (on one brand condition) on consumer attitude in Study 1

**Table H1. Two-Way ANOVA, tests of Between-Subjects Effects**

Dependent Variable: attitude\_BA

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
IV_CF	86.283	2	43.141	15.652	.000
IV_gender	.460	1	.460	.167	.683
IV_CF * IV_gender	1.564	2	.782	.284	.753
Error	537.483	195	2.756		
Total	629.889	201			
Corrected Total	625.895	200			

a. R Squared = .141 (Adjusted R Squared = .119)

**Table H2. Planned contrast, Univariate Tests**

Dependent Variable: attitude\_BA / IV\_CF \* IV\_gender Compare (IV\_gender)

IV_CF		Sum of Squares	df	Mean Square	F	Sig.
control	Contrast	.338	1	.338	.123	.726
	Error	537.483	195	2.756		
A_CFs	Contrast	.370	1	.370	.134	.714
	Error	537.483	195	2.756		
B_CFs	Contrast	1.309	1	1.309	.475	.492
	Error	537.483	195	2.756		

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

**Table H3. Planned contrast, Univariate Tests**

Dependent Variable: attitude\_BA / IV\_CF \* IV\_gender Compare (IV\_CF)

IV_gender		Sum of Squares	df	Mean Square	F	Sig.
men	Contrast	43.401	2	21.700	7.873	.001
	Error	537.483	195	2.756		
women	Contrast	44.709	2	22.354	8.110	.000
	Error	537.483	195	2.756		

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



## Appendix I. Survey of Study 2

Start of Block: known\_brand\_CF\_A

Your Preference Regarding Travel Bags

Please read the information given below about the two brands and answer the following questions.

Imagine that you are going to buy a travel bag at this moment. You find two of the latest luxury exclusive collections: a Fendi and a Gucci. Both are Italian genuine made come in a softer version of canvas, crafted from a coated microfiber fabric with the logo motif.

Fendi \$1,500	Gucci \$1,500
	
<u>Counterfeits exist</u> in the market.	No counterfeits exist in the market

Start of Block: known\_brand\_CF\_B

Your Preference Regarding Travel Bags

Please read the information given below about the two brands and answer the following questions.

Imagine that you are going to buy a travel bag at this moment. You find two of the latest luxury exclusive collections: a Fendi and a Gucci. Both are Italian genuine made come in a softer version of canvas, crafted from a coated microfiber fabric with the logo motif.

Fendi \$1,500	Gucci \$1,500
	
No counterfeits exist in the market	<u>Counterfeits exist</u> in the market.

Q1 Which brand would you choose?

☐ Fendi

☐ Gucci

---

Q2 Please rate [the brand "Fendi"](#).

	1	2	3	4	5	6	7	
Very bad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very good
Very unfavorable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very favorable
Very unattractive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very attractive

---

Q3 Please rate [the brand "Gucci"](#).

	1	2	3	4	5	6	7	
Very bad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very good
Very unfavorable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very favorable
Very unattractive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very attractive

---

Q4 You are required to rate each of the following statements:

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
"Fendi is of high quality."	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
"Fendi makes me feel unique."	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
"Fendi is perceived to be popular."	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q5 You are required to rate each of the following statements:

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
"Gucci is of high quality."	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
"Gucci makes me feel unique."	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
"Gucci is perceived to be popular."	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of Condition\_known\_brand



Start of Block: Unknown\_Brand\_CFs\_A

Your Preference Regarding Labtop Bags

Please read the information given below about the two brands and answer the following questions.

Imagine that you are going to buy a labtop bag at this moment. You find two of the latest luxury exclusive collections: a Valextra and a Del Giudice. Both are Italian genuine made come in a softer version of calf leather.

Valextra \$1,500	Del Giudice \$1,500
	
<u>Counterfeits exist</u> in the market	No counterfeits exist in the market

Start of Block: Unknown\_Brand\_CFs\_B

Your Preference Regarding Labtop Bags

Please read the information given below about the two brands and answer the following questions.

Imagine that you are going to buy a labtop bag at this moment. You find two of the latest luxury exclusive collections: a Valextra and a Del Giudice. Both are Italian genuine made come in a softer version of calf leather.

Valextra \$1,500	Del Giudice \$1,500
	
No counterfeits exist in the market	<u>Counterfeits exist</u> in the market

Q1 Which brand would you choose?

- ☐ Valestra
- ☐ Del Giudice

Q2 Please rate the brand " Valestra ".

	1	2	3	4	5	6	7	
Very bad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very good
Very unfavorable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very favorable
Very unattractive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very attractive

Q3 Please rate the brand " Del Giudice".

	1	2	3	4	5	6	7	
Very bad	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very good
Very unfavorable	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very favorable
Very unattractive	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very attractive

Q4 You are required to rate each of the following statements:

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
" Valextra is of high quality."	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
" Valextra makes me feel unique."	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
" Valextra is perceived to be popular."	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

---

Q5 You are required to rate each of the following statements:

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
" Del Giudice is of high quality."	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
" Del Giudice makes me feel unique."	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
" Del Giudice is perceived to be popular."	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

End of condition\_unknown\_brand

Start of Block: Naïve theory measurement

Q6 Please rate the following statements.

"Good products usually are...."

	1	2	3	4	5	6	7	
Very popular.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Very exclusive
Everybody loves them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Only selected people can buy them

" Good products usually are..."

	1	2	3	4	5	6	7	
Have counterfeits in the market.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	Do not have counterfeits in the market

End of Block: Naïve theory measurement

Start of Block: Demographic

Q7 what is your civil status?

- ☐ Married
- ☐ Widowed
- ☐ Divorced
- ☐ Separated
- ☐ Single (Never married)

Q8 What is your highest education degree?

- ☐ Less than high school
  - ☐ High school graduate
  - ☐ Some college
  - ☐ Bachelor/Undergraduate
  - ☐ Master/Postgraduate
  - ☐ Doctorate/PhD
  - ☐ Other \_\_\_\_\_
- 

Q9 Which of the following is most appropriate to describe your social roles?

- ☐ Employed full time
  - ☐ Employed part time
  - ☐ Unemployed looking for work
  - ☐ Unemployed not looking for work
  - ☐ Retired
  - ☐ Student
-

Q10 Please select your Socioeconomic status (average net income level per year).

- ☐ Less than \$10,000
- ☐ \$10,000 - \$19,999
- ☐ \$20,000 - \$29,999
- ☐ \$30,000 - \$39,999
- ☐ \$40,000 - \$49,999
- ☐ \$50,000 - \$59,999
- ☐ \$60,000 - \$69,999
- ☐ \$70,000 - \$79,999
- ☐ \$80,000 - \$89,999
- ☐ \$90,000 - \$99,999
- ☐ \$100,000 - \$149,999
- ☐ More than \$150,000

---

Q11 What is your gender?

- ☐ Male
- ☐ Female

---

Q12 What is your age?

---

End of Block: Demographic

---

## Appendix K. The effect of counterfeit information (on one brand condition) on consumer choice in Study 2

**Table K1. Crosstabulation, IV\_CF \* Which brand would you choose? \* IV\_Brand Awareness**

			Which brand would you choose?				
Brand awareness			Fendi		Cucci		Total
Known	IV_CF	A_CFs	11	25%	42	70%	53
		B_CFs	33	75%	18	30%	51
	Total		44		60		104
			Valextra		Del Giudice		
Unknown	IV_CF	A_CFs	11	22.9%	42	71.2%	53
		B_CFs	37	77.1%	17	28.8%	54
	Total		48		59		107
			Brand A		Brand B		
Known and unknown	IV_CF	A_CFs	22	23.9%	84	70.6%	106
		B_CFs	70	76.1%	35	29.4%	105
	Total		92		119		211

**Table K2. Chi-Square Tests, DV\_ Choice regardless brand awareness**

IV_brand		Value	df	Asymptotic Significance (2-sided)
known brand	Pearson Chi-Square	20.569 <sup>c</sup>	1	.000
	Likelihood Ratio	21.347	1	.000
	Linear-by-Linear Association	20.371	1	.000
	N of Valid Cases	104		
unknown brand	Pearson Chi-Square	24.669 <sup>d</sup>	1	.000
	Likelihood Ratio	25.795	1	.000
	Linear-by-Linear Association	24.439	1	.000
	N of Valid Cases	107		
Total	Pearson Chi-Square	45.216 <sup>a</sup>	1	.000
	Likelihood Ratio	47.110	1	.000
	Linear-by-Linear Association	45.002	1	.000
	N of Valid Cases	211		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 45.78.

b. Computed only for a 2x2 table

c. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 21.58.

d. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 23.78.

## Appendix J. The relationship between the information of an existing counterfeit and brand awareness in Study 2

Table J. Variables in the Equation by Binary-Logistic Regression Test in Study 2

		Variables in the Equation					
		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1 <sup>a</sup>	IV_brand(1)	.172	.414	.171	1	.679	1.187
	IV_CF (1)	2.117	.448	22.355	1	.000	8.310
	IV_CF (1) by IV_gender(1)	-.172	.633	.073	1	.786	.842
	Constant	-.778	.293	7.045	1	.008	.459

a. Variable(s) entered on step 1: IV\_brand, IV\_CFs, IV\_CFs \* IV\_brand.



## Appendix L. The effect of counterfeit information (on one brand condition) on consumer attitude in Study 2

**Table L1. Two-Way ANOVA, tests of Between-Subjects Effects**

Dependent Variable: attitude\_BA

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	39.534 <sup>a</sup>	3	13.178	5.246	.002
Intercept	17.959	1	17.959	7.150	.008
IV_CFs	33.748	1	33.748	13.435	.000
IV_brand	4.192	1	4.192	1.669	.198
IV_CFs * IV_brand	1.087	1	1.087	.433	.511
Error	519.971	207	2.512		
Total	577.333	211			
Corrected Total	559.505	210			

a. R Squared = .071 (Adjusted R Squared = .057)

**Table L2. Planned contrast, Univariate Tests**

Dependent Variable: attitude\_BA / IV\_CFs \* IV\_brand Compare (IV\_brand)

IV_CFs		Sum of Squares	df	Mean Square	F	Sig.
A has CFs	Contrast	.507	1	.507	.202	.654
	Error	519.971	207	2.512		
B has CFs	Contrast	4.750	1	4.750	1.891	.171
	Error	519.971	207	2.512		

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

**Table L3. Planned contrast, Univariate Tests**

Dependent Variable: attitude\_BA / IV\_CFs \* IV\_brand Compare (IV\_CFs)

IV_brand		Sum of Squares	df	Mean Square	F	Sig.
known brand	Contrast	11.199	1	11.199	4.458	.036
	Error	519.971	207	2.512		
unknown brand	Contrast	23.817	1	23.817	9.482	.002
	Error	519.971	207	2.512		

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

## Appendix M. Mediation Analysis with Hayes method in overall brand awareness conditions

Table M. Mediation Analysis with Hayes method in overall brand awareness conditions

\*\*\*\*\* PROCESS Procedure for SPSS Version 3.1 \*\*\*\*\*

Written by Andrew F. Hayes, Ph.D. [www.afhayes.com](http://www.afhayes.com)

Documentation available in Hayes (2018). [www.guilford.com/p/hayes3](http://www.guilford.com/p/hayes3)

\*\*\*\*\*

Model = 4

Y = Attitude\_BA

X = IV\_CFs

M1 : meBA\_quality

M2 : meBA\_uniqueness

M3 : meBA\_popularity

Sample size: 211

\*\*\*\*\*

### OUTCOME VARIABLE:

**meBA\_quality**

#### Model Summary

R	R-sq	MSE	F	df1	df2	p
.3042	.0925	1.9956	21.3126	1.0000	209.0000	.0000

#### Model

	coeff	se	t	p	LLCI	ULCI
constant	1.6149	.3071	5.2586	.0000	1.0095	2.2203
IV_CFs	-.8979	.1945	-4.6166	.0000	-1.2814	-.5145

\*\*\*\*\*

### OUTCOME VARIABLE:

**meBA\_uniqueness**

#### Model Summary

R	R-sq	MSE	F	df1	df2	p
.3714	.1380	3.2652	33.4477	1.0000	209.0000	.0000

#### Model

	coeff	se	t	p	LLCI	ULCI
constant	2.3540	.3928	5.9925	.0000	1.5796	3.1284
IV_CFs	-1.4389	.2488	-5.7834	.0000	-1.9294	-.9484

\*\*\*\*\*

### OUTCOME VARIABLE:

**meBA\_popularity**

#### Model Summary

R	R-sq	MSE	F	df1	df2	p
.1338	.0179	2.4857	3.8084	1.0000	209.0000	.0523

#### Model

	coeff	se	t	p	LLCI	ULCI
constant	.9425	.3427	2.7499	.0065	.2668	1.6182
IV_CFs	-.4236	.2171	-1.9515	.0523	-.8516	.0043

\*\*\*\*\*

### OUTCOME VARIABLE:

**att\_BA**

#### Model Summary

R	R-sq	MSE	F	df1	df2	p
.7391	.5463	1.2324	62.0025	4.0000	206.0000	.0000

Model						
	coeff	se	t	p	LLCI	ULCI
constant	.0920	.2637	.3488	.7276	-.4279	.6118
IV_CFs	-.0151	.1661	-.0908	.9277	-.3426	.3124
meBA_qua	.3283	.0721	4.5563	.0000	.1862	.4703
meBA_uni	.2694	.0589	4.5738	.0000	.1533	.3855
meBA_pop	.2565	.0594	4.3161	.0000	.1393	.3737

\*\*\*\*\* TOTAL EFFECT MODEL \*\*\*\*\*

**OUTCOME VARIABLE:**  
**att\_BA**

Model Summary

R	R-sq	MSE	F	df1	df2	p
.2475	.0613	2.5131	13.6395	1.0000	209.0000	.0003

Model						
	coeff	se	t	p	LLCI	ULCI
constant	1.4979	.3446	4.3466	.0000	.8185	2.1773
IV_CFs	-.8061	.2183	-3.6932	.0003	-1.2364	-.3758

\*\*\*\*\* TOTAL, DIRECT, AND INDIRECT EFFECTS \*\*\*\*\*

**Total effect of X on Y**

Effect	SE	t	p	LLCI	ULCI	c_ps
-.8061	.2183	-3.6932	.0003	-1.2364	-.3758	-.4939

**Direct effect of X on Y**

Effect	SE	t	p	LLCI	ULCI	c'_ps
-.0151	.1661	-.0908	.9277	-.3426	.3124	-.0092

**Indirect effect of X on Y**

	Effect	Boot SE	BootLLCI	BootULCI
TOTAL	-.7910	.1646	-1.1109	-.4690
meBA_qua	-.2948	.0955	-.5028	-.1295
meBA_uni	-.3876	.1075	-.6161	-.1942
meBA_pop	-.1087	.0601	-.2379	-.0016

**Partially standardized indirect effect of X on Y**

	Effect	Boot SE	BootLLCI	BootULCI
TOTAL	-.4846	.0928	-.6607	-.2991
meBA_qua	-.1806	.0563	-.3014	-.0826
meBA_uni	-.2375	.0639	-.3725	-.1211
meBA_pop	-.0666	.0362	-.1436	-.0010

\*\*\*\*\* ANALYSIS NOTES AND ERRORS \*\*\*\*\*

Level of confidence for all confidence intervals in output: 95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals: 5000

NOTE: Variables names longer than eight characters can produce incorrect output. Shorter variable names are recommended.

----- END MATRIX -----

## Appendix N. Mediation Analysis with Hayes method in known brand condition

Table N. Mediation Analysis with Hayes method in known brand condition

\*\*\*\*\* PROCESS Procedure for SPSS Version 3.1 \*\*\*\*\*

Written by Andrew F. Hayes, Ph.D. [www.afhayes.com](http://www.afhayes.com)

Documentation available in Hayes (2018). [www.guilford.com/p/hayes3](http://www.guilford.com/p/hayes3)

\*\*\*\*\*

Model = 4

Y = Attitude\_BA

X = IV\_CFs

M1 : meBA\_quality

M2 : meBA\_uniqueness

M3 : meBA\_popularity

Sample size: 104

\*\*\*\*\*

### OUTCOME VARIABLE:

**meBA\_quality**

#### Model Summary

R	R-sq	MSE	F	df1	df2	p
.1772	.0314	1.7209	3.3079	1.0000	102.0000	.0719

#### Model

	coeff	se	t	p	LLCI	ULCI
constant	1.0340	.4045	2.5563	.0121	.2317	1.8364
IV_CFs	-.4680	.2573	-1.8188	.0719	-.9784	.0424

\*\*\*\*\*

### OUTCOME VARIABLE:

**meBA\_uniqueness**

#### Model Summary

R	R-sq	MSE	F	df1	df2	p
.3479	.1210	2.6906	14.0425	1.0000	102.0000	.0003

#### Model

	coeff	se	t	p	LLCI	ULCI
constant	1.9604	.5058	3.8760	.0002	.9572	2.9636
IV_CFs	-1.2057	.3217	-3.7473	.0003	-1.8439	-.5675

\*\*\*\*\*

### OUTCOME VARIABLE:

**meBA\_popularity**

#### Model Summary

R	R-sq	MSE	F	df1	df2	p
.0950	.0090	1.7278	.9297	1.0000	102.0000	.3372

#### Model

	coeff	se	t	p	LLCI	ULCI
constant	.9090	.4053	2.2427	.0271	.1050	1.7129
IV_CFs	-.2486	.2578	-.9642	.3372	-.7600	.2628

\*\*\*\*\*

### OUTCOME VARIABLE:

**att\_BA**

#### Model Summary

R	R-sq	MSE	F	df1	df2	p
.7228	.5224	1.0766	27.0745	4.0000	99.0000	.0000

Model	coeff	se	t	p	LLCI	ULCI
constant	.3416	.3429	.9963	.3216	-.3388	1.0220
IV_CFs	-.1252	.2191	-.5714	.5691	-.5599	.3096
meBA_qua	.4442	.1077	4.1244	.0001	.2305	.6580
meBA_uni	.2311	.0929	2.4870	.0146	.0467	.4155
meBA_pop	.1798	.0906	1.9843	.0500	.0000	.3595

\*\*\*\*\* TOTAL EFFECT MODEL \*\*\*\*\*

**OUTCOME VARIABLE:**  
**att\_BA**

Model Summary

R	R-sq	MSE	F	df1	df2	p
.2240	.0502	2.0781	5.3891	1.0000	102.0000	.0223

Model	coeff	se	t	p	LLCI	ULCI
constant	1.4174	.4445	3.1888	.0019	.5358	2.2991
IV_CFs	-.6564	.2828	-2.3214	.0223	-1.2173	-.0956

\*\*\*\*\* TOTAL, DIRECT, AND INDIRECT EFFECTS \*\*\*\*\*

**Total effect of X on Y**

Effect	SE	t	p	LLCI	ULCI	c_ps
-.6564	.2828	-2.3214	.0223	-1.2173	-.0956	-.4460

**Direct effect of X on Y**

Effect	SE	t	p	LLCI	ULCI	c'_ps
-.1252	.2191	-.5714	.5691	-.5599	.3096	-.0850

**Indirect effect of X on Y**

	Effect	Boot SE	BootLLCI	BootULCI
TOTAL	-.5312	.2022	-.9301	-.1360
meBA_qua	-.2079	.1278	-.4960	.0113
meBA_uni	-.2787	.1284	-.5643	-.0621
meBA_pop	-.0447	.0490	-.1500	.0499

**Partially standardized indirect effect of X on Y**

	Effect	Boot SE	BootLLCI	BootULCI
TOTAL	-.3609	.1304	-.6098	-.0972
meBA_qua	-.1412	.0847	-.3303	.0078
meBA_uni	-.1893	.0843	-.3717	-.0438
meBA_pop	-.0304	.0338	-.1028	.0339

\*\*\*\*\* ANALYSIS NOTES AND ERRORS \*\*\*\*\*

Level of confidence for all confidence intervals in output: 95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals: 5000

NOTE: Variables names longer than eight characters can produce incorrect output. Shorter variable names are recommended.

----- END MATRIX -----

## Appendix O. Mediation Analysis with Hayes method in less-known brand condition

Table O. Mediation Analysis with Hayes method in less-known brand condition

\*\*\*\*\* PROCESS Procedure for SPSS Version 3.1 \*\*\*\*\*

Written by Andrew F. Hayes, Ph.D. [www.afhayes.com](http://www.afhayes.com)

Documentation available in Hayes (2018). [www.guilford.com/p/hayes3](http://www.guilford.com/p/hayes3)

\*\*\*\*\*

Model = 4

Y = Attitude\_BA

X = IV\_CFs

M1 : meBA\_quality

M2 : meBA\_uniqueness

M3 : meBA\_popularity

Sample size: 107

\*\*\*\*\*

### OUTCOME VARIABLE:

**meBA\_quality**

#### Model Summary

R	R-sq	MSE	F	df1	df2	p
.4075	.1660	2.2039	20.9029	1.0000	105.0000	.0000

#### Model

	coeff	se	t	p	LLCI	ULCI
constant	2.1803	.4551	4.7905	.0000	1.2779	3.0827
IV_CFs	-1.3124	.2870	-4.5720	.0000	-1.8815	-.7432

\*\*\*\*\*

### OUTCOME VARIABLE:

**meBA\_uniqueness**

#### Model Summary

R	R-sq	MSE	F	df1	df2	p
.3941	.1553	3.8546	19.3077	1.0000	105.0000	.0000

#### Model

	coeff	se	t	p	LLCI	ULCI
constant	2.7435	.6019	4.5580	.0000	1.5501	3.9370
IV_CFs	-1.6681	.3796	-4.3940	.0000	-2.4208	-.9153

\*\*\*\*\*

### OUTCOME VARIABLE:

**meBA\_popularity**

#### Model Summary

R	R-sq	MSE	F	df1	df2	p
.1629	.0265	3.1544	2.8630	1.0000	105.0000	.0936

#### Model

	coeff	se	t	p	LLCI	ULCI
constant	.9584	.5445	1.7602	.0813	-.1212	2.0381
IV_CFs	-.5811	.3434	-1.6920	.0936	-1.2620	.0999

\*\*\*\*\*

### OUTCOME VARIABLE:

**att\_BA**

#### Model Summary

R	R-sq	MSE	F	df1	df2	p
.7556	.5709	1.3960	33.9211	4.0000	102.0000	.0000

Model						
	coeff	se	t	p	LLCI	ULCI
constant	-.0537	.4129	-.1300	.8968	-.8726	.7653
IV_CFs	.0376	.2580	.1457	.8845	-.4741	.5492
meBA_qua	.2420	.1025	2.3610	.0201	.0387	.4452
meBA_uni	.2915	.0794	3.6713	.0004	.1340	.4491
meBA_pop	.3052	.0843	3.6222	.0005	.1381	.4724

\*\*\*\*\* TOTAL EFFECT MODEL \*\*\*\*\*

**OUTCOME VARIABLE:**  
**att\_BA**

Model Summary

R	R-sq	MSE	F	df1	df2	p
.2679	.0718	2.9333	8.1195	1.0000	105.0000	.0053

Model						
	coeff	se	t	p	LLCI	ULCI
constant	1.5663	.5251	2.9829	.0036	.5251	2.6074
IV_CFs	-.9436	.3312	-2.8495	.0053	-1.6003	-.2870

\*\*\*\*\* TOTAL, DIRECT, AND INDIRECT EFFECTS \*\*\*\*\*

**Total effect of X on Y**

Effect	SE	t	p	LLCI	ULCI	c_ps
-.9436	.3312	-2.8495	.0053	-1.6003	-.2870	-.5333

**Direct effect of X on Y**

Effect	SE	t	p	LLCI	ULCI	c'_ps
.0376	.2580	.1457	.8845	-.4741	.5492	.0212

**Indirect effect of X on Y**

	Effect	Boot SE	BootLLCI	BootULCI
TOTAL	-.9812	.2829	-1.5508	-.4392
meBA_qua	-.3175	.1775	-.7121	-.0203
meBA_uni	-.4863	.1764	-.8568	-.1685
meBA_pop	-.1774	.1232	-.4548	.0261

**Partially standardized indirect effect of X on Y**

	Effect	Boot SE	BootLLCI	BootULCI
TOTAL	-.5546	.1445	-.8336	-.2659
meBA_qua	-.1795	.0972	-.3931	-.0117
meBA_uni	-.2749	.0957	-.4739	-.0989
meBA_pop	-.1002	.0686	-.2462	.0153

\*\*\*\*\* ANALYSIS NOTES AND ERRORS \*\*\*\*\*

Level of confidence for all confidence intervals in output: 95.0000

Number of bootstrap samples for percentile bootstrap confidence intervals: 5000

NOTE: Variables names longer than eight characters can produce incorrect output. Shorter variable names are recommended.

----- END MATRIX -----