

Contents lists available at [SciVerse ScienceDirect](#)

Journal of Business Research



# Asymmetrical effects of past experiences with genuine fashion luxury brands and their counterfeits on purchase intention of each<sup>☆</sup>

Boonghee Yoo, Seung-Hee Lee<sup>\*</sup><sup>a</sup> Department of Marketing and International Business, Frank G. Zarb School of Business, Hofstra University, Hempstead, New York 11549 United States<sup>b</sup> Department of Clothing & Textiles, College of Art and Design, Ewha Womans University, Seoul, 120-750 South Korea

## ARTICLE INFO

## Article history:

Received 1 March 2011

Received in revised form 1 April 2011

Accepted 1 September 2011

Available online xxx

## Keywords:

Fashion marketing

Genuine luxury brands

Counterfeit luxury brands

Counterfeiting

Fashion

Purchase intention

Asymmetrical effect

Income

Brand name

Price

South Korea

## ABSTRACT

As counterfeiting activity continues to thrive around the world, marketers of fashion luxury brands work hard to discourage counterfeiting and to protect their revenues. This research evaluates the business risk related to fashion counterfeit consumption behavior by examining the effect of past experiences with counterfeit luxury brands (CLBs) and genuine luxury brands (GLBs). Based on survey data from five designer fashion product categories, Study 1 finds an asymmetrical effect that past experiences with GLBs are negatively related to purchase intention of CLBs, whereas past experiences with CLBs do not relate to purchase intention of GLBs. Study 2, based on experimental data from two luxury handbag brands with realistic price information, confirms the results of Study 1. This study also discusses research and managerial implications.

© 2011 Elsevier Inc. All rights reserved.

## 1. Introduction

McCarthy (2004) defines counterfeiting, or “manufacturing knockoff,” as “the act of producing or selling a product containing an intentional and calculated reproduction of a genuine trademark. A counterfeit mark is identical to or substantially indistinguishable from a genuine mark.” Counterfeiting activity is estimated to account for 5 to 7% of world trade, depriving genuine manufacturers of about \$600 billion a year, with a growth rate of 1700% over the past 10 years (Economist, 2010). As for luxury fashion brand counterfeiting, in the U.K., more than 64% of the U.K. Customs seizure cases were luxury brands (The Financial Times, 2005). U.S. Customs and Border Protection also reports luxury brands as a major object of counterfeiting, seizing about \$273 million in 2008, a 39% hike in value from the previous year (Casabona, 2009). Counterfeit luxury brands are so prevalent that the U.S. Congress advocates the Innovative Design Protection and Piracy

Prevention Act, which extends copyright protection to fashion brands and works for the Anti-Counterfeiting Trade Agreement with eleven countries that represent the major counterfeiting victims and offenders (The U.S. Congress, 2010).

Counterfeits create enor problems for the global society. First of all, they pose a serious threat to legitimate businesses by undermining innovation, which is a key component of corporate revenues and national economic growth (Wilke & Zaichkowsky, 1999). The U.S. Customs and Border Protection blame counterfeit merchandise for the loss of more than 750,000 American jobs as well as the loss of tax revenues (Meyers, 2008). Criminal investigations also find that counterfeits serve as a major means of supplying funds to terrorist organizations, including Al-Qaeda, Hezbollah in Lebanon, and the group accused of the Madrid train bombings in 2004 (International Herald Tribune, 2007; Ungoed-Thomas, 2005). Consequently, manufacturers, distributors, researchers, and policy makers pay a great deal of attention to developing strategies that discourage counterfeiting to protect the victims of counterfeiting. They propose and implement various anti-counterfeiting measures, including diligent legal litigation (Economist, 2010). Nevertheless, counterfeiting continues to thrive around the world because of the growing demand worldwide for well-known luxury brands, lack of consumer and counterfeiter morality, production and distribution capabilities in less developed countries, inadequate penalties for counterfeiters, and technological

<sup>☆</sup> The authors thank guest co-editor Eunju Ko (Yonsei University), three anonymous JBR reviewers, Arch G. Woodside (JBR Editor in Chief), James W. Gentry (University of Nebraska-Lincoln), and Jiwoong Shin (Yale University) for their valuable comments on an earlier version of this paper and Carol Porr and Kiwoong Yoo for editing advice; and they acknowledge that this research was supported by a Summer Research Grant from the Frank G. Zarb School of Business, Hofstra University.

<sup>\*</sup> Corresponding author. Tel.: +82 2 3277 3080; fax: +82 2 3277 2852.

E-mail addresses: [mktbzy@hofstra.edu](mailto:mktbzy@hofstra.edu) (B. Yoo), [leesh@ewha.ac.kr](mailto:leesh@ewha.ac.kr) (S.-H. Lee).

advances enabling counterfeiting activities (Chaudhry, 2006; Green & Smith, 2002; Lee & Yoo, 2009; Olsen & Granzin, 1993; Wee, Tan, & Cheok, 1995).

While marketers of genuine luxury brands (hereafter called GLBs) struggle with their corresponding counterfeit luxury brands (hereafter called CLBs), ironically, in the software industry, counterfeits are known to benefit original brands. For example, Conner and Rumelt (1991) find that software piracy increases the number of program users; consequently, manufacturers object to software protection. Givon, Mahajan, and Muller (1995) also find that the sales of genuine word processors and spreadsheets in the U.K. significantly increase because of active word-of-mouth resulting from pirated items. Slive and Bernhardt (1998) insist that software manufacturers maximize their profit by tolerating piracy. Maltz and Chiappetta (2002) oppose eliminating software pirates because they can help firms identify useful innovative technologies. Haruvy, Mahajan, and Prasad (2004) demonstrate with real market data that piracy aids a full and fast market penetration of software. The photocopying of journal articles by users (Liebowitz, 1985) as well as illegal music file sharing (Peitz & Waelbroeck, 2006) also has similar findings.

An important question that arises is whether, as observed in pirated software, inferior products (CLBs in our research) benefit quality products (GLBs) (McGinnis & Gentry, 2009). Obviously, marketers of GLBs must not agree, but little research has investigated the effect of CLBs on GLBs and vice versa. Therefore, the purpose of this research is to examine the effect of past experiences with CLBs (GLBs) on the purchase intent for GLBs (CLBs). The result will be a major contribution of this study to the literature. In the study, we narrowly define *counterfeit consumers* as consumers who are not deceived by counterfeiters, but knowingly purchase and consume CLBs. In fact, such nondeceived consumers of CLBs comprise the majority of such consumers; they are well aware of unlawful retail outlets selling CLBs, and such sellers also explicitly inform consumers that they are selling CLBs (Gentry, Putrevu, Shultz, & Commuri, 2001; Grossman & Shapiro, 1988).

In the following sections, we summarize the current research trend on CLBs, develop research hypotheses, and conduct two studies to test the hypotheses across luxury fashion product categories. Finally, we discuss the managerial and research implications of the findings.

## 2. Research trend and hypothesis development

### 2.1. Research trend and past behavior

Researchers describe possible antecedents of intention to purchase CLBs by a variety of variables (Lee & Yoo, 2009). Based on a comprehensive literature review, Eisend and Schuchert-Güler (2006) classify the determinants into four groups. The first group includes demographic and psychological characteristics (Bloch, Bush, & Campbell, 1993; Cheung & Prendergast, 2006); self image (Bloch et al., 1993; Yoo & Lee, 2009); social expressions (i.e., to express themselves and to fit in; Wilcox, Kim, & Sen, 2009); attitudes toward counterfeiting (Cordell, Wongtada, & Kieschnick, 1996; Penz & Stöttinger, 2005; Schlegelmilch, Stöttinger, & Der Kauf, 1999); readiness to take risk, fashion involvement, ethical predisposition, self identity, and price consciousness (Penz & Stöttinger, 2005); and materialism and expected future social status (Yoo & Lee, 2009). The second group consists of product-related features such as product importance, retailer image, durability, style, fashionableness, and price (Bloch et al., 1993); product attributes and brand image (Bian & Moutinho, 2009); price of GLBs (Harvey & Wallas, 2003); and quality differences between CLBs and GLBs (Jenner & Artun, 2005; Schlegelmilch et al., 1999). The third group has social and cultural contexts such as expected penalty associated with counterfeit purchase and culture (Harvey & Wallas, 2003); social norm (Penz & Stöttinger, 2005); and anti-counterfeiting campaigns (Schlegelmilch et al., 1999).

The fourth group includes purchase situations and mood of consumer such as access to the counterfeits (Penz & Stöttinger,

2005). The above review shows that little research has investigated two important issues on counterfeiting: first, how marketing activities of GLB firms affect CLB purchases and, second, how past behavior (e.g., purchase experiences with CLBs) affects CLB and GLB purchase intentions. The purpose of this study is to examine the role of past behavior on CLBs and GLBs. Future research needs to examine the effect of GLB marketing activities on CLB-related consumer behaviors.

The theory of reasoned action finds that past behavior affects future behavior more significantly than intentions or perceptions of behavioral control do (Bagozzi, 1981; Ouellette & Wood, 1998). Past behavior generates an inertial habit with repeated behavior and predicts future behavior better than cognitive evaluations of alternatives do (Bamberg, Ajzen, & Schmidt, 2003). As a result, past behavior heavily influences the current and future shopping patterns of consumers. This view predicts that once consumers use CLBs, they are likely to buy them again, although such product choice inertia may diminish in the long run. Seetharaman, Ainslie, and Chintagunta (1999) confirm that inertial choice behavior formed by past behavior makes consumers repeat the same purchase patterns and is less sensitive to marketing programs developed to change such decision-making.

Such findings about past behavior suggest that the more consumers experience CLBs the more they will be likely to purchase them. However, in the context of luxury fashion brands, past behavior is likely to provide consumers with unique consequences; some of them are negative and others are positive. These consequences would in turn affect the behavior related to GLBs in a unique way, which might be different from the consumers of pirated software. Specifically, our four hypotheses investigate the effect of past purchase experiences with CLBs and GLBs on the future intention to purchase each.

### 2.2. Research hypotheses

#### 2.2.1. The effect of past experiences with CLBs on the purchase intention of CLBs

As consumers experience CLBs, the research expects that they are likely to purchase more CLBs not only because of habitual behavior with regard to buying CLBs, which is the strongest reason, but also for the following weaker reasons. First, many consumers tend to buy CLBs for novelty and variety needs, and such novelty- and variety-seeking behavior is more frequently found for less expensive products (Wee et al., 1995). Consumers perceive the brand name, the label, and recognizable design characteristics such as logo, color, and pattern to be valuable. Such hedonistic or novelty reasons make consumers value a CLB for its own sake (Babin, Darden, & Griffin, 1994). When consumers pursue hedonistic rather than utilitarian or status needs, they will easily accept CLBs and not worry about probable low quality. Even when others notice that they consume CLBs, consumers who do so for pure hedonistic reasons will not feel socially embarrassed. They do not consider a consumer image built on CLBs to be an issue of lower self-esteem. Second, CLBs separate prestige from quality aspects of GLBs, while GLBs offer both (Grossman & Shapiro, 1988). One main goal that consumers pursue from CLBs is higher social status. Accordingly, the primary benefit of CLBs is symbolic rather than functional, although high-end CLBs provide satisfactory physical quality (Gentry et al., 2001). As long as observers have difficulty to distinguish CLBs from GLBs, symbolic shopping purposes will reinforce consumers' desire to continue purchasing CLBs (Grossman & Shapiro, 1988; Wilcox et al., 2009). Third, CLBs provide price advantage, which researchers consider to be the primary reason for buying CLBs (Albers-Miller, 1999; Dodge, Edwards, & Fullerton, 1996; Harvey & Wallas, 2003; Prendergast, Chuen, & Phau, 2002). A CLB is a lower-quality, lower-price choice, whereas a GLB is a higher-quality, higher-price choice (Gentry, Putrevu, & Shultz, 2006; Prendergast et al., 2002). However, interestingly enough, CLB consumers do not mind low quality and poor materials because they do not see CLBs as inferior choices when they see the economic benefits of such products, a decision

that is probably due to budget constraints (Dodge et al., 1996; Nia & Zaichkowsky, 2000). Instead, they perceive the purchase of CLBs to be better in an economic sense and enhance societal welfare (Ang, Cheng, Lim, & Tambyah, 2001; Van Kempen, 2003). Therefore,

**H1.** Past experiences with CLBs related positively to the intention to buy CLBs.

### 2.2.2. The effect of past experiences with CLBs on the purchase intention of GLBs

No significant correlation is likely between past experiences with CLBs and the intention to buy GLBs due to a mixed effect in which CLB experiences would produce favorable attitudes toward GLBs, but those attitudes are unlikely to generate strong enough intention to buy GLBs. Consequently, CLB experiences have no impact on GLB purchases. But let us discuss why consumers would prefer GLBs after experiencing CLBs. First, consumers might not consider CLBs to be serious and ultimate purchases, but a prelude to the purchase of GLBs (Gentry et al., 2001). Admitting that a CLB is an inferior version of a GLB, consumers try a CLB as an experiment and as part of an ongoing quest whose ultimate goal is to make a decision on the purchase of GLBs. (Wee et al., 1995).

Second, CLB consumers develop a fear of being embarrassed and losing status, which stems from their familiarity and involvement with GLBs (d'Astous & Gargouri, 2001). CLBs would therefore induce consumers to consider GLBs as a better choice, which is more true in case consumers have high normative susceptibility (high expectations of what would impress others) (Van Kempen, 2003). Through experiences with CLBs, consumers become more aware of the value of GLBs than before: GLBs provide all the positive benefits such as exclusivity, durability, better quality, after-sales service, low social risk, status, ethicality, and legality (Cheung & Prendergast, 2006; Yoo & Lee, 2009).

Third, the brand equity theory predicts that CLB consumers switch to GLBs particularly because of the memory and knowledge of the original brand. Brand equity is the value added to a product by its brand name, but the brand name alone does not guarantee strong brand equity because a CLB is unlikely to transfer specific and positive brand associations attached to a GLB, which is built through long-term personal experiences with the GLB (Yoo, Donthu, & Lee, 2000). However, despite all those risks of CLBs and benefits of GLBs, CLB consumers are unlikely to increase the purchase intention of GLBs.

Most of all, they cannot ignore the price advantage of CLBs, which will make GLBs look less attractive (Albers-Miller, 1999; Dodge et al., 1996; Harvey & Wallas, 2003; Prendergast et al., 2002). Purchased CLBs prove that consumers are not free from financial restraints or that they are prone to savings and sensitive to prices, appreciating the low-price choice for the same brand name. In addition, CLB consumers lose interest in GLBs for non-price related reasons. A most salient one is demonstrated in using a product in public to impress or keep up with other people. From that perspective, CLBs function in the same manner as GLBs do. Therefore, positive and negative effects of experiences with CLBs, when mixed together, would result in no significant impact on the intention to purchase GLBs.

**H2.** Past experiences with CLBs do not relate to the intention to buy GLBs.

### 2.2.3. The effect of past experiences with GLBs on the purchase intention of CLBs

We expect that being familiar with GLBs is likely to affect the purchase intention level of CLBs negatively because GLB consumers are determined status-seekers (Mason, 1998). Their conspicuous behavior can be better explained by “positioning economy” (consumption is significantly influenced by social and psychological motives associated with attempts to improve relative social standing and prestige) than traditional

“material economy” (consumption is purely influenced by utilitarian considerations) (Mason, 2001).

Having familiarity with GLBs, they are more likely to exclude CLBs from their purchase consideration after evaluating the social and functional risks linked to CLBs, ultimately losing interest in buying them. Therefore,

**H3.** Past experiences with GLBs relate negatively to the intention to buy CLBs.

### 2.2.4. The effect of past experiences with GLBs on the purchase intention of GLBs

We also expect that once consumers have bought GLBs they will purchase more GLBs than before because GLBs fulfill their desire for higher social status through ostentatious display (Wilcox et al., 2009). First, GLB consumers would continue to be gratified by the admiration of observers who recognize the GLBs being used. Since the GLB is a sign of wealth and social superiority, one strong reason for buying GLBs stems from the desire of superiority over others (Mason, 1998). Thus, such consumption should be conspicuous to others. To status-seeking consumers, a GLB is an expression of membership to an elite society. Second, GLB consumers would experience less cognitive dissonance because the inherent quality of the GLBs matches the prestigious product image tangibly (Nia & Zaichkowsky, 2000). More importantly, status-seeking consumers would be self-satisfied by their socially inspired perceptions of how other consumers see them (Mason, 1998).

As a result, consumers would enhance their self-image by continuing to buy GLBs.

**H4.** Past experiences with GLBs relate positively to the intention to buy GLBs.

## 3. Method

To test the hypotheses, we conducted two studies. In Study 1, using a descriptive survey method, we examined how past behavior affects purchase intention of GLBs and CLBs. In Study 2, we examined Study 1 findings under experimental conditions in which the price level of both CLBs and GLBs was manipulated because price takes an important role in purchases of luxury fashion brands.

### 3.1. Study 1 (A survey)

#### 3.1.1. Selecting product categories and brand

Five luxury fashion product categories (i.e., designer handbags, shoes, apparel, sunglasses, and jewelry such as watches, earrings, rings, and necklaces) were selected for the following reasons. First, the degree of luxury brand counterfeiting is enormous for these fashion product categories. Second, they are consumer products with which consumers are very familiar. Third, as we examine nondeceptive counterfeiting, the selected categories fit the purpose of the research well. Fourth, functional and symbolic attributes of these product categories are well-balanced. Finally, consumers recognize major brands in the selected categories.

To decide which specific luxury fashion brands should be selected from each category, we conducted a pretest with 500 female college students attending major universities in South Korea (hereafter called Korea), which is a great producer, exporter, and consumer of CLBs. Korea's luxury fashion brand market has increased by 12% last 5 years and is now estimated as \$3.8 billion, but might be much larger when counterfeits are taken into account (The Asia Economist, 2011). We asked participants to indicate their past behavior with individual brands in each of the product categories. Based on the collected data, we selected top brands whose counterfeits were purchased by the majority of those who had ever bought CLBs of each product category.

Prada and Louis Vuitton were selected for luxury handbags as they account for 64.7% of those who had ever purchased counterfeit luxury handbags; likewise, Salvatore Ferragamo and Gucci, 59.3% for designer shoes; DKNY, Prada, and Calvin Klein, 56.6% for apparel; Gucci and Chanel, 54.3% for sunglasses; and Agatha, Cartier, and Tiffany, 53.2% for jewelry.

### 3.1.2. Data collection procedure and measures

A new sample of female university students in Korea voluntarily participated in the study. Interviewers visited classes on scheduled dates and explained the study to the participants and asked them to answer the survey. A student sample is often considered inadequate because of its poor representation of the general population. However, students are deemed adequate in this sort of study because first, they are frequently examined for counterfeiting research (Chakraborty, Allred, & Bristol, 1996; Cordell et al., 1996). In fact, female Korean students, called the “Luxury Generation,” actively purchase both CLBs and GLBs (Park, Rabolt, & Jeon, 2008; Yoo & Lee, 2009). Second, students as a maximally homogeneous sample are expedient for theory validation research (Calder, Philips, & Tybout, 1981).

A total of 400 participants completed the questionnaire. Elimination of incomplete responses left 332 eligible responses for analysis. They were 21.4 years old on average ( $SD = 2.9$ ). Their CLB and GLB purchasing experience was 50% and 40% for the selected handbag brands, respectively; 37% and 25% for the designer shoes brands; 43% and 50% for the apparel brands; 27% and 44% for the sunglasses brands; and 48% and 49% for the jewelry brands.

We measured purchase intention of CLBs and GLBs by five items. We repeated the following question for each of the five product categories (anchored with “very unlikely” as 1 and “very likely” as 7): “How much are you willing to purchase any of the following CLBs (GLBs)?” The reliability of purchase intention was .87 for CLBs and .91 for GLBs. We also measured past experiences with CLBs (GLBs) by five items, each of which was computed by adding up the responses to the following two yes–no questions: “Have you ever purchased any of the following CLBs (GLBs)?” (purchase experience) and “Have you ever owned any of the following CLBs (GLBs)?” (ownership experience). The reliability of the five-item past experiences was .60 for CLBs and .74 for GLBs.

We then conducted exploratory factor analysis for the 20 items (i.e., 2 types of product: CLB vs. GLB  $\times$  5 product categories  $\times$  2 purchase variables: past purchase vs. intention to buy) to examine whether the responses would be loaded on the intended factors. Factor analysis with a Varimax rotation method produced four clear factors, and all items were highly loaded on their corresponding factors, confirming discriminant and convergent validity of measures. The variance explained by the factors was 59.2% overall. Specifically, purchase intention of CLBs accounted for 18.7% of the variance; purchase intention of GLBs, 19.5%; past experiences with CLBs, 8.7%; and past experiences with GLBs, 12.3%.

### 3.1.3. Analysis and result

We conducted structural equation modeling to estimate parameters of the structural model in an effort to test the hypotheses simultaneously and obtained the completely standardized solutions by the LISREL 8 maximum likelihood method. The result is reported in Fig. 1. The structural model specified the purchase experiences as the exogenous constructs (with CLBs as  $\xi_1$  and with GLBs as  $\xi_2$ ), both of which were related to two endogenous constructs (intention to purchase CLBs as  $\eta_1$  and intention to buy GLBs as  $\eta_2$ ). Goodness-of-fit statistics, indicating the overall acceptability of the structural model analyzed, were satisfactory:  $\chi^2_{(158)} = 405.48$ ,  $RMSEA = .069$ ,  $SRMR = .057$ ,  $GFI = .89$ ,  $AGFI = .85$ ,  $CFI = .91$  and  $IFI = .91$ . Past behavior was related to purchase intention, as hypothesized. Specifically, past experiences with CLBs were positively related to intention to buy CLBs (H1). Their path estimate was .87 ( $t = 5.80$ ,  $p < .0001$ ). Past experiences with CLBs were not significantly related to intention to buy GLBs (H2). Their estimate was .09 ( $t = 1.36$ ).

Past experiences with GLBs were negatively related to intention to buy CLBs (H3). Their estimate was  $-.23$  ( $t = -2.87$ ,  $p < .01$ ). On the other hand, past experiences with GLBs were positively related to intention to buy GLBs (H4). Their estimate was .48 ( $t = 6.55$ ,  $p < .0001$ ). In summary, all hypotheses were supported.

Past experiences alone explained 68% of the variance of purchase intention of CLBs and 27% of the variance of purchase intention of GLBs. This high amount of variance explained for demonstrates that purchase intention of both CLBs and GLBs was substantially influenced by past behavior. Interestingly enough, however, the direction of influence was asymmetrical between CLBs and GLBs: as hypothesized, past experiences with CLBs did not affect purchase intention of GLBs, whereas past experiences with GLBs decreased purchase intention of CLBs.

To check the robustness of the findings, the two dependent variables were individually regressed on the same two independent variables as well as four other control variables: age and income were measured as one ratio scale each and materialism and self image were respectively measured by Richins and Dawson's (1992) 18-item scale of materialism and Ahn, Lee, Lim, Yang, and Lennon's (2001) 19-item scale of self-image. The resulting regression confirmed the same directional effect of past product experiences. Specifically, Intention to purchase CLBs =  $.08 - .02$  (n.s.)  $\times$  Age  $- .008$  (n.s.)  $\times$  Income  $+ .30$  ( $p < .01$ )  $\times$  Materialism  $+ .17$  ( $p < .10$ )  $\times$  Self-image  $+ .48$  ( $p < .0001$ )  $\times$  Past experiences with CLBs  $- .12$  ( $p < .05$ )  $\times$  Past experiences with GLBs. R-square was .27 ( $F = 19.08$ ,  $p < .0001$ ). In contrast, Intention to purchase GLBs =  $-.62 - .02$  (n.s.)  $\times$  Age  $+ .02$  ( $p < .01$ )  $\times$  Income  $+ .79$  ( $p < .0001$ )  $\times$  Materialism  $+ .29$  ( $p < .01$ )  $\times$  Self-image  $+ .14$  ( $p < .01$ )  $\times$  Past experiences with CLBs  $+ .22$  ( $p < .001$ )  $\times$  Past experiences with GLBs. R-square was .33 ( $F = 25.39$ ,  $p < .0001$ ). The only difference from the LISREL result was the significant positive effect of past experiences with CLBs on purchase intention of GLBs. The major contribution to this difference must be income: if the constraint of income is resolved, CLB consumers might actually develop desire for GLBs.

## 3.2. Study 2 (An experimentation)

The findings from Study 1 confirm that past experiences with luxury fashion brands, either counterfeit or genuine, are related to purchase intention of CLBs and GLBs in asymmetrical ways. However, to overcome the weakness inherent in the cross-sectional survey method, we additionally constructed Study 2, an experiment.

### 3.2.1. Experimental design and data collection

For Study 2, we selected two real luxury brands (Prada and Louis Vuitton) of the designer handbag category. As reported in Study 1, Prada's and Louis Vuitton's counterfeits were the two most popularly purchased brands in the category. The experimental design was 2 (brand name: Prada and Louis Vuitton; within) by 2 (price of the GLB: US\$1000 and US\$500; between) by 4 (price of the CLB; absence of the counterfeit, 5% of the GLB price, 10%, and 20%; between). We did not manipulate only the brand name but also the price level of CLBs and GLBs. Price is known as the most crucial factor for CLB purchases (Albers-Miller, 1999; Bloch et al., 1993; Dodge et al., 1996; Harvey & Wallas, 2003; Prendergast et al., 2002). The rationale of the hypotheses of this study was heavily related to price, but in Study 1 the price information was neither manipulated nor measured.

However, by letting participants exposed to realistic price explicitly, Study 2 attempts to make a more convincing case about the findings of Study 1. We selected the prices of the GLBs and their corresponding CLBs based on actual purchase prices found in Study 1 to represent realistic market prices. In this experimental design, purchase intention of the CLBs and GLBs was a function of brand name, price, and past behavior. But note that the purpose of Study 2 was not to test the effect of brand name or price but to test the robustness of the findings of Study 1 under experimental conditions with realistic market information.

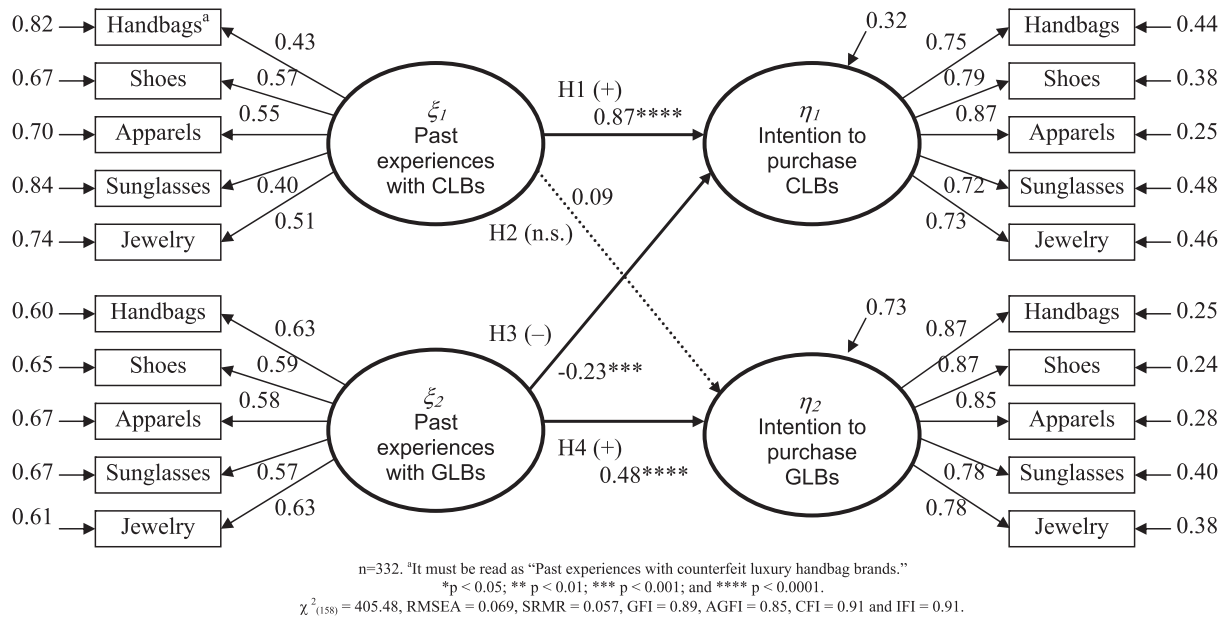


Fig. 1. The asymmetrical effect of past experiences with CLBs and GLBs on the purchase intention of each (Study 1: A survey).

A new sample of female college students in Korea voluntarily participated in the study. First, we asked participants to provide their past two-year purchase experiences with the genuine and counterfeit handbags of the two brands selected, along with demographic information. Then, we asked participants to read one of the eight experimental scenarios for Prada, which was randomly assigned to them. On the next page, we asked them to do the same task for the Louis Vuitton handbag for one of its eight scenarios. The third version of the Prada scenarios, for example, read in big letters, "Assume that you see the two following products while shopping: a genuine Prada handbag for \$1000 and its counterfeit version for \$100." Then, we asked them to reply to the two-item purchase intention scale for each of the GLBs and the CLBs: "How much are you willing to purchase this genuine (counterfeit) handbag?" The purchase intention was measured twice: anchored in "very unlikely" as 1 to "very likely" as 7 and "not at all" as 1 to "a lot" as 7. Purchase intention was the mean score of the two items. The scale achieved a very satisfactory reliability ranging from .90 to .97 for both GLBs and CLBs across experimental conditions.

Overall, the study obtains 420 eligible responses for Study 2. Each experimental design scenario was responded to by 44 to 59 participants, showing no significant difference in frequency ( $\chi^2_{(7)} = 3.16$ ,  $p > .85$ ). Participants were 21.5 years old on average (SD = 2.6) and their monthly personal discretionary income ranged from US\$50 to US\$1200, with an average of US\$339 (SD = US\$144). Those who purchased a genuine luxury handbag paid US\$554 on average for Prada and US\$754 for Louis Vuitton, whereas those who bought a counterfeit version paid US\$48 for Prada and US\$74 for Louis Vuitton.

3.2.2. Hypotheses testing and result

We tested the same four hypotheses of Study 1 with Study 2 data. We used the pooled sample because of its potential to capture the overall trend across experimental conditions and resolve the small sample size problem that might take place when testing the hypotheses separately for individual experimental conditions. For the structural equation model as shown in Fig. 2, two exogenous variables were created to indicate past experiences with counterfeit ( $\xi_1$ ) and genuine ( $\xi_2$ ) brands, each of which consisted of two items: purchase experiences with Prada and Louis Vuitton handbags for the last 2 years. Two endogenous variables measured intention to buy counterfeit ( $\eta_1$ ) and genuine ( $\eta_2$ ) brands. Each endogenous variable consisted of two items, each

which was a mean score of two 7-point purchase intention questions for each brand.

Fig. 2 reports the completely standardized solutions for the structural model by LISREL. Goodness-of-fit statistics indicate that the model analyzed has a good fit:  $\chi^2_{(15)} = 28.95$  ( $p < .05$ ), RMSEA = .033, SRMR = .034, GFI = .98, AGFI = .96, CFI = .97 and IFI = .97. Overall, the model accounted for 32% of the variance in intention to purchase CLBs and 13% of the variance in intention to purchase GLBs. The result shows that past experiences with CLBs were positively related to intention to buy CLBs (H1) with the path estimate of .57 ( $t = 4.27$ ,  $p < .0001$ ). Past experiences with CLBs were not significantly related to intention to buy GLBs (H2). The estimate was .02 ( $t = .28$ ). Past experiences with GLBs were negatively related to intention to buy CLBs (H3). Their estimate was  $-.14$  ( $t = -1.79$ ,  $p < .05$ ). On the other hand, past experiences with GLBs were positively related to intention to buy GLBs (H4). The estimate was .36 ( $t = 4.14$ ,  $p < .0001$ ). In summary, all the hypotheses were again supported in Study 2.

The result was consistent with that of Study 1. In particular, H2, supported in both studies, clearly reveals the importance of price in GLB purchases. When CLB consumers were given both the GLB's price (US\$500 or US\$1000) and its counterfeit's price (ranging from 5% to 20% of the GLB price), they lost the desire to purchase the GLBs. However, the good news was that the path between past CLB experiences and the purchase intention of GLBs was not negative. CLB buyers did not resort to the CLBs even when learning that the GLB was too expensive. Unlike CLB consumers, GLB consumers kept strong loyalty to GLBs, and were not affected at all by the availability and low price of CLBs.

3.2.3. Examining the predictors of purchase intention of GLBs and CLBs

To examine further what other factors affect the purchase intention of GLBs and CLBs, we conducted regression with Study 2 data for five predictors: brand name, income, CLB ratio, GLB price, and CLB price. Brand name (two values) was a dummy variable where Louis Vuitton was a benchmark brand over Prada. Income (ratio-scaled) reflected monthly discretionary income translated into US dollars. CLB ratio was computed by the proportion of CLB purchases over the combined CLB and GLB purchases. The ratio ranged from 0 (have purchased GLBs only) to 1 (have purchased CLBs only). GLB price (two values) was the price of the genuine handbag brand (US\$1000 versus US\$500). CLB price (three values) was the price of the counterfeit handbag

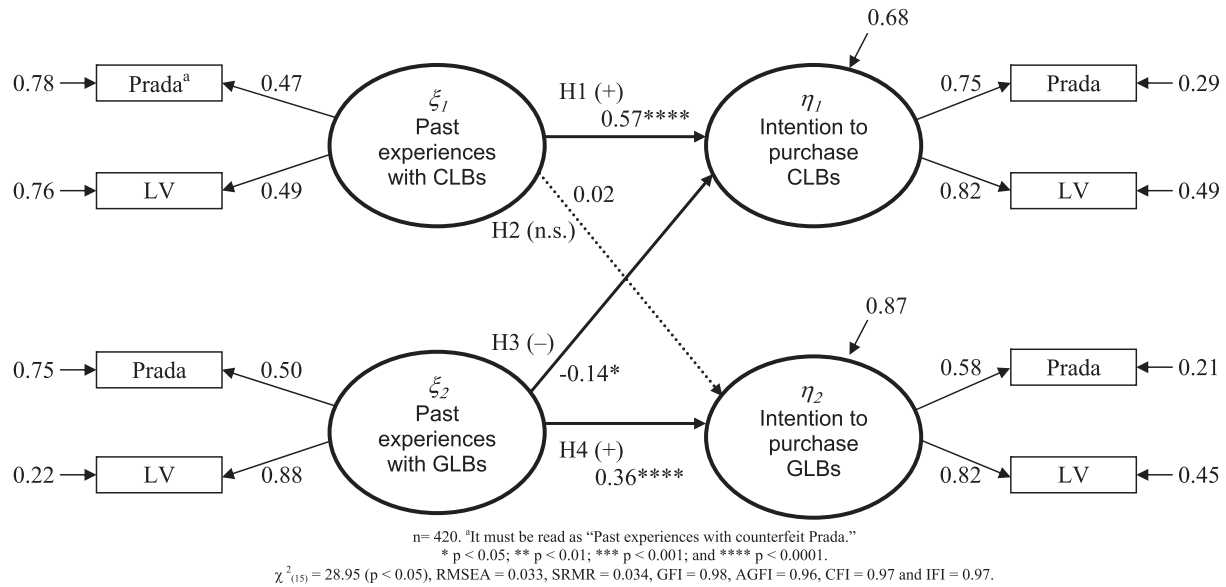


Fig. 2. The asymmetrical effect of past experiences with CLBs and GLBs on the purchase intention of each (Study 2: An experimentation).

(US\$50, \$100, versus \$200 for a \$1000 genuine handbag; \$25, \$50, versus \$100 for a \$500 genuine handbag, which represented 5%, 10%, and 20% of the price of the genuine handbag).

As reported in Table 1, both dependent variables were predicted well (R-square of .34 for CLB purchase intention and .25 for GLB purchase intention,  $p < .0001$ ). Purchase intention of GLBs was significantly affected by four factors (brand name, income, CLB purchase ratio, GLB price), whereas purchase intention of CLBs was affected by three factors (income, CLB ratio, and CLB price). From the regression analysis, the following important observations can be made. First, brand name was a significant factor in the GLB purchase ( $p < .01$ ) but not in the CLB purchase. This difference might imply that the value of brand name (i.e., brand equity) matters only when buying GLBs but not CLBs. In conclusion, consumers do not care what brand they are wearing for CLBs. Second, income affected the GLB purchase positively ( $p < .05$ ) but the CLB purchase negatively ( $p < .05$ ), meaning high-income consumers buy GLBs whereas low-income consumers buy CLBs. This difference must be good news to fashion marketers of GLBs because, due to the enormous income gap, GLB and CLB markets appear well separated and have little interactions with each other, implying that CLB consumption may not seriously affect the revenues of GLBs.

Third, the CLB ratio affected the GLB purchase negatively ( $p < .001$ ) but the CLB purchase positively ( $p < .001$ ). This result was consistent with the main hypotheses of this study in that the more frequent consumers are exposed to the CLB (GLB) the more likely are they to purchase the CLB (GLB), confirming d'Astous and Gargouri (2001)

Table 1  
Antecedents of purchase intention of luxury brands: regression results.

| Independent variables | Dependent variables           |                               |
|-----------------------|-------------------------------|-------------------------------|
|                       | Purchase intention of the GLB | Purchase intention of the CLB |
| Intercept             | 3.6580 ****                   | 3.4183 ****                   |
| Brand name            | 0.7297 **                     | 0.1151                        |
| Income                | 0.0019 *                      | -0.0020 *                     |
| CLB ratio             | -1.1955 ***                   | 1.2899 ***                    |
| GLB price             | -0.0011 *                     | -0.0003                       |
| CLB price             | -0.0015                       | -0.0080 *                     |
| R <sup>2</sup>        | 0.34 ****                     | 0.25 ****                     |

\* $p < 0.05$ ; \*\* $p < 0.01$ ; \*\*\* $p < 0.001$ ; and \*\*\*\* $p < 0.0001$ .

finding that CLB evaluations associates negatively with brand loyalty to GLB and vice versa.

Fourth, the GLB price affected the GLB purchase negatively ( $p < .05$ ) but did not affect the CLB purchase, whereas the CLB price affected the purchase negatively ( $p < .05$ ) but did not affect the GLB purchase. This asymmetrical relationship shows two things: purchase intention of either a GLB or a CLB is a function of its own price, not of the other alternative's price, and consumers prefer a lower price for both GLB and CLB. Consumers pursue the economic advantage of CLBs, but even when buying GLBs they prefer a lower price.

#### 4. Discussions and implications

Study 1 and Study 2, confirming the hypotheses, include four major findings. First, past behavior of GLBs is a strong predictor of future behavioral intention toward GLBs. Second, past behavior of CLBs is a strong predictor of future behavioral intention toward CLBs. CLB consumers show a strong purchase intent for CLBs even when not given the advantageous price of CLBs and the intimidating price of GLBs.

Third, GLB consumers show negative intention to buy CLBs, not developing an interest in CLBs at all, even when the advantageous price information of CLBs is available. The more often they experience GLBs, the less likely consumers purchase CLBs. Fourth, CLB consumption experiences are not related to intention to buy GLBs. This result cautiously implies that CLB consumers might not steal the sales of GLBs because however many of CLBs they have purchased before do not decrease the desire to buy GLBs, and that past experiences with CLBs are simply irrelevant to GLB purchases in the future. This result is consistent with Nia and Zaichkowsky (2000) in that CLBs do not decrease the demand for GLBs and that the value, satisfaction, and status of GLBs do not diminish as a result of the availability of CLBs.

Study 2 (experimental design) produced the very same result as Study 1 (cross-sectional survey). In Study 2 price information was provided for both GLBs and CLBs, but the negative relationship between past experiences with GLBs and purchase intention of CLBs was maintained, meaning that GLB buyers were not tempted at all by cheap CLB prices. At the same time, the study found no relationship between past experiences with CLBs and purchase intention of GLBs, which means that CLB consumers were not intimidated by the

expensive GLB prices. As a result, they did not develop hostile behavioral intention against GLBs. The price disadvantage of GLBs as well as the price advantage of CLBs did not make CLB buyers develop a dislike for GLBs or make GLB buyers develop a love for CLBs. However, as Table 1 reports, the GLB (CLB) price matters only when a consumer buys the GLB (CLB), not the other. In summary, buying a GLB (CLB) is affected by its own price level, but not by the alternative's, that is, the CLB's (GLB's) price.

#### 4.1. Managerial and policy implications

Counterfeit consumer behavior is very important to luxury fashion brand manufacturers, distributors, and policy makers (e.g., Lee & Yoo, 2009). The purpose of this research was to examine exactly how past experiences with CLBs is related to the purchase intention of GLBs and vice versa. This research shows that the answer depends on two factors: past behavior and product price. If a consumer has bought more CLBs than GLBs in the past, the consumer is more likely to buy CLBs. On the other hand, if a consumer has bought more GLBs than CLBs, the consumer does not mind the price gap between the GLB and its counterfeit version and is highly likely to choose the GLB over the CLB.

Based on those findings, strategists should consider implementing the following managerial ideas to increase purchase intent for luxury fashion brands in the midst of the thriving counterfeiting phenomenon.

First, the current study finds that CLB consumers develop a strong intention to buy CLBs. Therefore, consumers should be discouraged not to develop such behaviors. For that purpose, for example, consider promoting consumers' perceived risks of buying and consuming CLBs.

As consumers buy luxury fashion brands to satisfy a desire for social and financial status, recognition, and superiority, they would reject CLBs, believing they could be embarrassed socially in front of others (Ha & Lennon, 2006; Nia & Zaichkowsky, 2000; Penz & Stöttinger, 2005; Wilcox et al., 2009). Appealing to the law to maximize the social risk of CLB consumption may be one of the best methods (Prendergast et al., 2002) of eliminating CLBs. Appealing to the law would be very effective in coercively constraining consumers' habitual practice of buying CLBs since they rely on past behavior without much consideration of cognitive and rational evaluations to control the behavior (Yoo & Lee, 2009). Unfortunately, in luxury brand counterfeiting, copyright laws punish mainly the supply side of it, such as creators, manufacturers, distributors, dealers, and sellers (e.g., Colchester, 2010), but rarely the demand side, such as buyers and owners (Lee & Yoo, 2009).

However, Penz and Stöttinger (2005) find that the fewer the obstacles to purchase CLBs, the higher the intention to purchase them. This suggests that a legal action against CLB consumption would create huge concern in the consumer's mind. Harvey and Wallas (2003) find through an experiment that consumers would not buy CLBs if they had a high chance of being detected and prosecuted by law enforcement authorities for purchasing them. Accordingly, they call for more stringent enforcement of anti-counterfeiting legislation penalizing individual buyers. From this perspective, the fact that fashion counterfeits are often implicated in terrorist activities should be used for a development of anti-counterfeit law against individual CLB consumers (e.g., Johnson, 2010).

Actively promoting the fact that money could possibly go to funding terrorist organizations would help to curb the appeal of counterfeit products (International Herald Tribune, 2007). Bringing CLB consumers to court is not feasible, yet under current laws, diligent investigation and prosecution of copyright law violators among CLB suppliers could work as a very effective tool to educate consumers that CLBs are illicit products and buying them is a socially undesirable behavior (Albers-Miller, 1999).

Second, as the high price of GLBs significantly discourages the intention to buy GLBs, the value of GLBs should be enhanced. For example, the styles and designs of GLBs need to last for a reasonable length of time to make spending money on GLBs seem to be worthwhile. Although fashion, style, and popularity are important characteristics of luxury brands, fast and radical changes of the design would encourage consumers to buy CLBs to live up with fast-changing designs, which decrease the financial value of existing GLBs. But when the design or major theme fades slowly enough, the expensive price of the GLB would pay off as the consumer can use the product for a long time. Even when a change of the design should be made, key patterns by which consumers recognize the brand from others must remain unchanged to minimize social embarrassment that might occur from wearing out-dated designs.

Third, as the price advantage of CLBs is not a determinant of GLB purchases, in order to make consumers switch from CLBs to GLBs, fashion marketers should convince counterfeit consumers that non-economic benefits of GLBs overwhelmingly outweigh those of CLBs. For example, not only brand name but also other brand benefits such as durability of the brand, warranty, refund, and post-purchase services should be communicated to consumers because a counterfeiter can easily copy the brand name but not other brand attributes. Such educational communication will help consumers to balance the expensive price of a GLB with the lower price of a CLB. At the same time, consumer education should also emphasize the negative consequences of CLBs on legitimate businesses, conveying the sentiment of fashion marketers. For example, Santo Versace, president of Altagama and Versace, remarked (Euronews, 2010), "If you purchase a counterfeit product, first of all you're supporting the black economy and in practice, tax evasion as well as child labor and the financing of organized crime. So if you buy a fake article I think that you'll be ashamed of yourself."

Fourth, fashion marketers of luxury brands can make new GLB items delivered faster by using designated online shopping sites (O'Connell, 2010). Such a fast move would make the manufacturing and delivery of counterfeits much slower than that of GLBs, and the designated online sites will guarantee the purchase of authentic products. A lot of online shopping sites such as eBay have made buying and selling CLBs much easier. Sales of CLBs via the internet are estimated to reach \$135 billion in 2010 and are likely to increase (Economist, 2010).

Fifth, this study finds that once consumers own and use GLBs, they are very likely to become loyal consumers to GLBs. For that purpose, affordable versions of GLBs can be an effective tool to attract CLB consumers. They may function as a bridge in aiding consumers to adopt GLBs quickly and permanently.

Of course, however, the strategy of less expensive products could engender an erosion of the brand's reputation and could cannibalize revenues of the more expensive versions of the brand. In a worse scenario, the affordable versions could be perceived as semi-counterfeits, diluting the brand equity. To avoid such problems, lower priced GLBs need to distinguish themselves from high-end GLBs. One practical idea is to target young consumers such as teens and preteens with designs that are more affordable in price and more youthful in design.

#### 4.2. Research implications

The study here examines the impact of past behavior on the purchase intention of GLBs and CLBs. Although purchase intention is strongly linked to actual purchase, future research needs to examine purchase behavior directly. One idea is to use a choice task in which consumers are asked to make a purchase choice between a GLB and its counterfeit version. Such a choice task may create a more realistic situation for consumers in which they are allowed to buy only one item, real or fake. And the task would be able to examine dynamic choice behaviors between GLBs and CLBs under a variety of experimental settings.

In Study 2, brand name, income, and price strongly influence the buying intention of CLBs and GLBs. Future research needs to investigate the role of each in more detail. In addition, future research needs to identify other factors that influence CLB purchases. Suspected but under-researched factors include personal factors, environmental factors, and product and marketing factors. Research will reveal which factors drive consumers to select CLBs over GLBs and vice versa. From such studies, managers and policy makers will be able to formulate more effective measures against CLB consumption behaviors.

Most studies focus on individual differences in explaining consumer behavior related to CLBs, but future research also needs to examine cultural differences. For example, consumers in a collectivist culture, being more afraid of social disapproval, might not want to reveal that their products are in fact fakes, whereas consumers in an individualist culture, in which individual decisions are respected, might boast to friends about consuming quality fakes for a much lower price. But an understanding of how cultural environments of the society and individuals' cultural values motivate consumers to purchase CLBs remains largely unknown (e.g., Yoo, Donthu, & Lenartowicz, 2011; Yoo, Lee, & Jung, 2011).

The current study relies on self-reports, but consumers are likely to underreport the consumption of illicit products. Such social desirability bias, a major threat to the validity of research, is often found among those who are older, more educated, employed, and living with their own family (Kim, Hill, & Martha, 2003). As our sample was female college students, they did not fit the profile of those susceptible to the bias. Nevertheless, future research needs to take into consideration how to detect and eliminate the bias.

Further longitudinal studies need to be conducted to examine how individual consumers develop more responsible consumption behaviors against CLBs over time, for example, as they get older or earn a different level of income. Likewise, how and why consumers switch between CLBs and GLBs needs to be studied, which will shed more insights into effective anti-counterfeiting strategies. Finally, future research needs to determine whether or not the results of this study hold in countries where economic conditions and anti-counterfeiting regulations are quite different and whether they hold equally for domestic versus foreign luxury brands (Granzin & Olsen, 1998).

## References

- Ahn CS, Lee SH, Lim S, Yang Y, Lennon SJ. A comparative analysis between the Kawabata instrumental evaluation and the subjective evaluation of Korean and American consumers. *Journal of the Korean Society of Clothing and Textiles* 2001;25(2): 217–27.
- Albers-Miller ND. Consumer misbehavior: Why people buy illicit goods. *Journal of Consumer Marketing* 1999;16(3):273–87.
- Ang SH, Cheng PS, Lim EAC, Tambyah SK. Spot the difference: Consumer responses towards counterfeits. *Journal of Consumer Marketing* 2001;18(3):219–35.
- Babin BJ, Darden WR, Griffin M. Work and/or fun: Measuring hedonic and utilitarian shopping value. *Journal of Consumer Research* 1994;20:644–56. March.
- Bagozzi RP. Attitudes, intentions, and behavior: A test of some key hypotheses. *Journal of Personality and Social Psychology* 1981;41(4):607–27.
- Bamberg S, Ajzen I, Schmidt P. Choice of travel mode in the theory of planned behavior: The roles of past behavior, habit, and reasoned action. *Basic and Applied Social Psychology* 2003;25(3):175–87.
- Bian X, Moutinho L. An investigation of determinants of counterfeit purchase consideration. *Journal of Business Research* 2009;62(3):368–78.
- Bloch PH, Bush RF, Campbell L. Consumer "accomplices" in product counterfeiting: A demand-side investigation. *Journal of Consumer Marketing* 1993;10(4):27–36.
- Calder BJ, Philips LW, Tybout AM. Designing research for application. *Journal of Consumer Research* 1981;8:197–207. September.
- Casabona L. Seizures of counterfeit accessories increase in 2008. *Women's Wear Daily* 2009. January 9.
- Chakraborty G, Allred AT, Bristol T. Exploring consumers' evaluations of counterfeits: The roles of country of origin and ethnocentrism. *Advances in Consumer Research* 1996;23:379–84.
- Chaudhry PE. Managing intellectual property rights: Government tactics to curtail counterfeit trade. *European Business Law Review* 2006;17(4):939–58.
- Cheung WL, Prendergast G. Buyers' perceptions of pirated products in China. *Marketing Intelligence & Planning* 2006;24(5):446–62.
- Colchester M. eBay to pay damages to unit of LVMH. *Wall Street Journal* 2010. February 12.
- Conner KR, Rumelt RP. Software Piracy: An analysis of protection strategies. *Management Science* 1991;37:125–39. February.
- Cordell VV, Wongtada N, Kieschnick Jr R. Counterfeit purchase intentions: Role of lawfulness attitudes and product traits as determinants. *Journal of Business Research* 1996;35(1):41–53.
- d'Astous A, Gargouri E. Consumer evaluations of brand imitations. *European Journal of Marketing* 2001;35(1/2):153–67.
- Dodge HR, Edwards EA, Fullerton S. Consumer transgressions in the marketplace: Consumers' perspectives. *Psychology and Marketing* 1996;13(8):821–35.
- Economist. Knock-offs catch on: Fake goods are proliferating, to the dismay of companies and governments. *The Economist*; 2010. March 4.
- Eisend M, Schuchert-Güler P. Explaining counterfeit purchases: A review and preview. *Academy of Marketing Science Review* 2006;10(10):1–25.
- Euronews. Italian fashion industry plagued by fakes. *Euronews*; 2010. February 27.
- Gentry JW, Putrevu S, Shultz II C, Commuri S. How now Ralph Lauren? The separation of brand and product in a counterfeit culture. *Advances in Consumer Research* 2001;28:258–65.
- Gentry JW, Putrevu S, Shultz II C. The effects of counterfeiting on consumer search. *Journal of Consumer Behaviour* 2006;5:1–12. September.
- Givon M, Mahajan V, Muller E. Software piracy: Estimation of lost sales and the impact on software diffusion. *Journal of Marketing* 1995;59:29–37. January.
- Granzin KL, Olsen JE. Americans' choice of domestic over foreign products: A matter of helping behavior? *Journal of Business Research* 1998;43:39–54. September.
- Green RT, Smith T. Executive insights: Countering brand counterfeiters. *Journal of International Marketing* 2002;10(4):89–106.
- Grossman GM, Shapiro C. Foreign counterfeiting of status goods. *Quarterly Journal of Economics* 1988;103:79–100. February.
- Ha S, Lennon SJ. Purchase intent for fashion counterfeit products: Ethical ideologies, ethical judgments, and perceived risks. *Clothing and Textiles Research Journal* 2006;24:297–315. October.
- Haruvy E, Mahajan V, Prasad A. The effect of piracy on the market penetration of subscription software. *Journal of Business* 2004;77:S81–S107. April.
- Harvey PJ, Wallas WD. Laboratory markets in counterfeits goods: Hong Kong versus Las Vegas. *Applied Economics Letters* 2003;10(14):883–7.
- International Herald Tribune. Counterfeit goods are linked to terror groups; 2007. February 12.
- Jenner T, Artun E. Determinanten des erwerbs gefälschter markenprodukte – ergebnisse einer empirischen untersuchung. *Der Markt* 2005;44(3/4):142–50.
- Johnson K. U.S. seizes big batches of fake goods. *Wall Street Journal* 2010. April 26.
- Kim M, Hill T, Martha N. Validity of self-report of illicit drug use in young hypertensive urban African American males. *Addictive Behaviors* 2003;28:795–802. June.
- Lee SH, Yoo B. A Review of determinants of counterfeiting and piracy and the proposition for future research. *Korean Journal of Policy Studies* 2009;24(1):1–38.
- Liebowitz SJ. Copying and indirect appropriability: Photocopying of journals. *Journal of Political Economy* 1985;93(5):945–57.
- Maltz E, Chiappetta V. Maximizing value in the digital world. *Sloan Management Review* 2002;43:77–84. Spring.
- Mason R. The Economics of conspicuous consumption: Theory and thought since 1700. Cheltenham, United Kingdom: Edward Elgar Publishing; 1998.
- Mason R. Conspicuous consumption and the positional economy: Policy and prescription since 1970. *Managerial and Decision Economics* 2001;21:123–32. April/June.
- McCarthy JT. McCarthy's desk encyclopedia of intellectual property. third edition. Washington, DC: Bureau of National Affairs; 2004.
- McGinnis LP, Gentry JW. Underdog consumption: An exploration into meanings and motives. *Journal of Business Research* 2009;62:191–9. February.
- Meyers R. Counter attack: as phony goods flood the market, companies fight to protect their brands. *CFO Magazine*; 2008. June 1.
- Nia A, Zaichkowsky JL. Do counterfeits devalue the ownership of luxury brands? *The Journal of Product and Brand Management* 2000;9(7):485–97.
- O'Connell V. From catwalk to closet, faster. *Wall Street Journal* 2010. February 17.
- Olsen JE, Granzin KL. Using channels constructs to explain dealers' willingness to help manufacturers combat counterfeiting. *Journal of Business Research* 1993;27: 147–70. June.
- Ouellette JA, Wood W. Habit and intention in everyday life: The multiple processes by which past behavior predicts future behavior. *Psychological Bulletin* 1998;124: 54–74.
- Park HJ, Rabolt NJ, Jeon KS. Purchasing global luxury brands among young Korean consumers. *Journal of Fashion Marketing and Management* 2008;12(2):244–59.
- Peitz M, Waelbroeck P. Why the music industry may gain from free downloading – The role of sampling. *International Journal of Industrial Organization* 2006;24:907–13.
- Penz E, Stöttinger B. Forget the 'real' thing – Take the copy! an explanatory model for the volitional purchase of counterfeit products. *Advances in Consumer Research* 2005;32(1):568–75.
- Prendergast G, Chuen LH, Phau I. Understanding consumer demand for non-deceptive pirated brands. *Marketing Intelligence and Planning* 2002;20(7):405–16.
- Richins ML, Dawson S. A consumer values orientation for materialism and its measurement: Scale development and validation. *Journal of Consumer Research* 1992;19: 303–16. December.
- Schlegelmilch BB, Stöttinger B. Der Kauf G. Markenprodukte: die lust auf das verbotene. *Marketing ZFP* 1999;22(3):196–208.
- Seetharaman PB, Ainslie A, Chintagunta PK. Investigating household state dependence effects across categories. *Journal of Marketing Research* 1999;36:488–500. November.
- Slive J, Bernhardt D. Pirated for profit. *Canadian Journal of Economics* 1998;31:886–99. October.

- The Asia Economist. Eccentric luxury brand addiction of Korean consumers; 2011. September 2.
- The Financial Times. Sharp rise in swoops on pirate goods counterfeiting; 2005. February 17.
- The U.S. Congress. Innovative Design Protection and Piracy Prevention Act; 2010. December 6.
- Ungoed-Thomas J. Designer fakes are funding Al-Qaeda. Times Online March 20, 2005; 2005.
- Van Kempen L. Fooling the eye of the beholder: Deceptive status signaling among the poor in developing countries. *Journal of International Development* 2003;15:157–77. March.
- Wee CH, Tan SJ, Cheok KH. Non-price determinants of intention to purchase counterfeits goods. *International Marketing Review* 1995;12(6):19–46.
- Wilcox K, Kim HM, Sen S. Why do consumers buy counterfeit luxury brands? *Journal of Marketing Research* 2009;46:247–59. April.
- Wilke R, Zaichkowsky JL. Brand imitation and its effects on innovation, competition, and brand equity. *Business Horizons* 1999;42:9–18. November–December.
- Yoo B, Lee SH. Buy genuine luxury fashion products or counterfeits? *Advances in Consumer Research* 2009;36:280–6.
- Yoo B, Donthu N, Lee S. An examination of selected marketing mix elements and brand equity. *Journal of the Academy of Marketing Science* 2000;28:195–211. April.
- Yoo B, Donthu N, Lenartowicz T. Measuring Hofstede's five dimensions of cultural values at the individual level: Development and validation of CVSCALE. *Journal of International Consumer Marketing* 2011;23(3/4):193–210.
- Yoo B, Lee SH, Jung K. The effect of consumer ethics on purchase intention of luxury counterfeits and genuine items 2011. Presented in the symposium of luxury and counterfeiting: Issues, challenges and prospects, Geneva, Switzerland; 2011.