Do Counterfeits Promote Genuine Products?

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ABSTRACT

As counterfeiting activity continues to thrive around the world, firms manufacturing genuine

items work hard to discourage counterfeiting and protect their revenues. But the authors suggested

the possibility that firms might benefit from counterfeits. The purpose of this research was to

investigate the extent to which counterfeit items function as a promotion to increase sales of

genuine items. Based on survey data from five luxury fashion product categories, Study 1 strongly

confirmed that both consumers of counterfeit and genuine items generally prefer genuine items to

counterfeits, that consumers of genuine items do not have a stronger intention to buy counterfeits

than nonconsumers of genuine items, and that consumers of counterfeits also have a stronger

purchase intention for the genuine items than nonconsumers of counterfeits. But the purchase intent

difference between genuine and counterfeit items was smaller for consumers of counterfeits than for

consumers of genuine items. Based on experimental data from two luxury handbag brands, Study 2

generally repeated the results of Study 1, but showed that when price information is provided the

preference of genuine items diminishes, resulting in no significant difference from the preference of

counterfeits. In addition, the hypothesis that consumers of counterfeits will show stronger intention

to buy genuine items than will nonconsumers of counterfeits was not supported with price

information given.

Key words: Counterfeits, counterfeiting, genuine items, fashion, luxury

Do Counterfeits Promote Genuine Products?

Counterfeiting activity is a worldwide phenomenon rapidly increasing in every country, developing or developed. Counterfeits are now estimated to account for 5% to 7% of world trade (Business News 2005a). Counterfeiting is defined 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" (McCarthy 2004). A counterfeit is called by many different names such as knock-off, imitation, fake, bogus, copy, copycat, and overrun, which are a little bit different in exact meaning but not different in creating similar problems to businesses (Wilke and Zaichkowsky 1999). Product categories being counterfeited include designer apparels, accessories, pharmaceuticals, computer memory chips, automobile parts, motorcycles, cell phones, cigarettes, liquor, tea, golf clubs, video game controllers, music, movies, and computer software, to name a few. Counterfeits of some product categories threaten consumer safety, often resulting in fatalities. For example, counterfeit airplane parts, recycled from downed airplanes, become a major source of plane crashes (Maloo and Darrow 2001). Counterfeit drugs account for five percent of all medicines, seriously damaging human lives and public health (Wechsler 2002). According to the U.S. Bureau of Customs and Border Protection, it is estimated that counterfeiting costs the United States \$200 billion annually (The U.S. House of Representatives 2005). And Chinese counterfeits alone cost the U.S., Europe, and Japan more than \$60 billion in retail sales (Time 2005). In summary, counterfeiting activity has been understood to be negative as damaging brand reputations, revenues, and profits; undermining research and development and marketing costs; threatening human lives; increasing legal fees to prosecute counterfeiters; and raising product prices (see Wee, Tan, and Cheok 1995).

Accordingly, practitioners, researchers, and policy makers have paid a great amount of attention to developing strategies to discourage counterfeiting and protect the victims of

counterfeiting. Various anti-counterfeiting measures have been proposed and implemented, including international treaties and enforcement of intellectual property rights to prosecute counterfeiters, use of multiple labeling and packaging techniques to make counterfeiting difficult, consumer education via a warning through an advertising campaign, tight control of retail stores, and consultations with both government agencies and other industry manufacturers (Chaudhury and Walsh 1996; Collins-Dodd and Zaichkowsky 1999). The documentary episode of a CEO's anti-counterfeiting operations in Thailand provides a clear illustration on the difficulty, complexity, and danger of fighting counterfeiters (Green and Smith 2002). Despite such efforts, counterfeiting continues to thrive around the world because of worldwide growing demand for well-known brands, lack of consumer and counterfeiter morality, technological advances enabling counterfeiting, production and distribution capabilities in less developed countries, and inadequate penalties for counterfeiters (Business Week 2005a: Wee et al. 1995).

While firms are often unsuccessfully struggling with counterfeiting, however, some researchers have examined with cautions the possibility that firms might benefit from counterfeits because consumers of counterfeits might become buyers of genuine items. Such a possibility was examined, in particular, in computer software piracy. For example, Conner and Rumelt (1991) argued that piracy increases the number of program users, and the existence of pirated software stimulates an interest in legal copies. In conclusion, they objected to software protection because it decreases the number of users. Givon, Mahajan, and Muller (1995) found that the sales of genuine word processors and spreadsheets in the United Kingdom significantly increased because of active word-of-mouth resulting from pirates. Furthermore, Maltz and Chiappetta (2002) object to eliminating software pirates because they can help firms identify useful technologies.

Two questions arise from the studies of software piracy. First, can the same findings be found in other product categories, especially luxury fashion product categories, which are the

biggest counterfeit item categories? For example, in the UK, more than 64 per cent of the UK Customs seizure cases were fashion products, and of these cases, 17.5 per cent were fake Louis Vuitton goods (The Financial Times 2005). Likewise, the U.S. Customs and Border Protection reports fashion products as a major product type of counterfeiting. Second, pirated software functions in exactly the same way as the genuine item, but counterfeited fashion products do not. They are more often disposable, fall apart, and are inferior in all aspects except for brand name, although the quality of some counterfeits can be occasionally as high as that of the genuine items (Gentry et al. 2001). Therefore, it will be important to investigate whether or not counterfeiting of fashion products helps the sales of genuine items, as observed in the case of software piracy.

The purpose of our study is to examine the effect of counterfeit fashion products on the sales of genuine items. In this study, we argue that presence of counterfeits is more likely to help consumers to desire possessing genuine items rather than counterfeits. Firms will accordingly have more revenue gains than losses. Therefore, firms need not be eager to eradicate counterfeiting. Instead, they may welcome and capitalize on counterfeits because counterfeit items function as a promotion for genuine items, and this way, counterfeit items take the role of the cheapest way of promotion. In the study, we narrowly define consumers of counterfeits as consumers who are not deceived by counterfeiters but knowingly purchase and consume counterfeits. In fact, such nondeceptive consumers of counterfeits comprise the majority of such consumers; they are well aware of unlawful retail outlets selling counterfeits, and the sellers also explicitly inform consumers that they are selling counterfeits (Grossman and Shapiro 1988). Such a market scene is frequently observed in countries that do not enforce copyright laws strictly. In the following sections, we discuss the theoretical rationale for counterfeit consumption behaviors, develop research hypotheses, and test them in two studies of consumers across fashion product categories that are greatly counterfeited. Finally, we discuss the implications of the results.

Hypothesis Development

General Preference for Genuine Items over Counterfeits

Consumer decision models assume that consumers follow a rational decision-making process in which they search for product information and compare brands before making a brand choice (Howard 1994). Brand choice depends on the degree to which brands are compared for the considered set of evaluative criteria (Nowlis and Simonson 1997). Consumer behavior theories suggest that when comparing genuine items and counterfeits on the rational basis, consumers would show a tendency to choose genuine items rather than counterfeits. Several major marketing theories support consumers' general preferences for genuine items instead of counterfeits.

First, perceived risk theory strongly indicates that consumers are more likely to prefer genuine items to counterfeit items to reduce the perceived risks related to counterfeits. Types of perceived risk include performance, physical, social, physical, psychological, and time risk. Obviously, counterfeit fashion goods generate various types of risks, among which financial, performance, and social risks are particularly relevant (Nia and Zaichkowsky 2000; Wee et al. 1995; Wilke and Zaichkowsky 1999). For example, the quality and materials of counterfeits are inferior to those of genuine items in most cases (Gentry, Putreyu, and Shultz, II, forthcoming). Counterfeits are unlikely to be as durable and reliable as genuine items because they are not subject to the required safety standards and responsibilities, and they are usually made of low-grade materials. They also lack certain minor details and usually have inferior packaging. Such lack of performance and perfection will disappoint consumers who intend to make a rational brand choice decision. More importantly, by consuming a counterfeit product, one risks social status. Publicly self-conscious consumers are concerned about their impression on others, physical appearance, and fashions and are sensitive to interpersonal rejections (Nia and Zaichkowsky 2000). Therefore, a serious consumer will choose a genuine item over a counterfeit to reduce risks involved with the

consumption of counterfeits. On the other hand, we admit that if a consumer seeks pleasure from a novelty item, buys it for the fun of it, and tries first before making a commitment, she or he will choose the counterfeit over the genuine item without perceiving high risks.

Second, price-quality heuristics theory clearly suggests that genuine items' high prices connote high quality, whereas counterfeits' low prices connote low quality (Wilke and Zaichkowsky 1999). Counterfeits are much cheaper than genuine items, about a tenth of their store price or even less (The Times 2002). Studies consistently show that consumers heavily use price as a major extrinsic cue to heuristically judge product quality, believing that price is positively related to product quality, and such price-quality perceptions are found to be universal across countries, although actual quality has no relationship with price (Dawar and Parker 1994; Lichtenstein, Ridgway, and Netemeyer 1993). Therefore, an unreasonably low price of counterfeits convinces consumers that the counterfeits must be of unreasonably low quality. Although consumers may enjoy economic benefits and feel values from counterfeits thanks to their low prices, they, in fact, trade the product quality of genuine items for the price advantage (Albers-Miller 1999). This is likely to produce discomfort particularly among those who wanted to own a high quality product and use the product as a means of expressing their social status to others. Such discomfort and cognitive dissonance would make them prefer genuine items to counterfeits.

Third, brand equity theory strongly predicts that consumers are more likely to prefer genuine items to counterfeits because of the strength associated with the brand. Brand equity is the value added to a product by its brand name and can be earned only through long-term marketing investments into the brand (Yoo, Donthu, and Lee 2000). Brand name, as an important extrinsic cue for quality, makes it easy for consumers to process the information, reduce search efforts, and make a purchase decision (Aaker 1991; Keller 1993). When the brand is of high brand-name value, consumers tend to blindly rely on the brand name to judge objective product quality, which is the

power of brand equity. As brand equity consists of not only brand name awareness but perceived quality, brand loyalty, and brand associations, being labeled with a well-known prestigious brand name does not guarantee the same brand equity. Because consumers know that they are buying a counterfeit, it is hard for them to transfer specific and positive brand associations to the counterfeit. Personal associations with a brand, a major brand equity component, are usually built through long-term personal experiences (Aaker 1991; Keller 1993). But when the consumer considers the counterfeit to be different from the genuine item, she or he will not feel the product association for the counterfeit. Certain high-end counterfeits may have really identical physical quality (Gentry et al. 2001), but even in that situation the genuine item will be preferred because it owns the authenticity, the originality, and the uniqueness that counterfeits, due to their illegitimacy, can never possess (Wilke and Zaichkowsky 1999).

Overall, counterfeits are not evaluated as better than genuine items in every major evaluative criterion except for price and fun. Thus, consumers will show greater preference for genuine items than counterfeits, no matter what product experiences they have. Specifically, consumers will show stronger intention to buy genuine items than to buy counterfeits. This statement will hold to any type of consumers: consumers of counterfeits (H1), nonconsumers of counterfeits (H2), consumers of genuine items (H3), and nonconsumers of genuine items (H4).

The Effect of Counterfeit Experiences on Preference for Counterfeit and Genuine Items

We expect that once consumers have experienced a counterfeit item, they will prefer both counterfeits and genuine items more than consumers who have no such experience. In other words, consumers of counterfeits simultaneously develop a preference for counterfeits as well as genuine items rather than reduce their preference for one type of product and increase their preference for the other kind. Consumers of counterfeits will prefer counterfeits more than will nonconsumers of counterfeits for four reasons. First, many consumers buy counterfeits for novelty and playfulness

purposes out of curiosity. For example, Silk Alley in Beijing used to be a tourist place for backpackers to shop fake handbags, sneakers, and designer fashion items (Time 2005). Many consumers are motivated to buy counterfeits for novelty and variety because such novelty- and variety-seeking behavior is more frequently found for less expensive products (Wee et al. 1995). Consumers find that the brand name, the label, and identifying design characteristics such as logo and distinctive materials are themselves valuable. Such a hedonic and novelty benefit values a product for its own sake, whereas the utilitarian benefit values the degree to which a product serves its intended functional purpose (Babin, Darden, and Griffin 1994). When consumers pursue hedonic rather than utilitarian needs, they will easily keep purchasing counterfeits. For example, tourists often purchase counterfeits to represent the fact that they have traveled to Beijing, Bali, or Bangkok. Furthermore, they may not mind low quality. Even in case others notice they consume counterfeits, consumers who do so for a pure hedonic reason will not feel embarrassed. Therefore, they do not consider a consumer image built on fake products an issue of fragility.

Second, counterfeits separate prestige from quality aspects of status goods, while genuine items offer both (Grossman and Shapiro 1988). Counterfeits allow consumers to buy prestige only at a lower price as opposed to buying quality at a high price. Higher social status is a main goal that consumers pursue from counterfeits; they want to demonstrate who they want to be. Accordingly, the primary benefit of counterfeits is symbolic rather than functional. Low-income consumers who cannot afford both prestige and quality are more likely to become consumers of counterfeits, although some counterfeits such as overruns sold in the same market structure are comparable to the genuine items, and high-end counterfeits provide satisfactory quality (Gentry et al. 2001). In the context of counterfeits, a symbolic benefit can be achieved to the degree that consumers enjoy the status associated with the genuine items by successfully impressing casual observers (Grossman and

Shapiro 1988). As long as it is difficult to distinguish counterfeits from genuine items, symbolic shopping purposes will reinforce consumers to stay with counterfeits.

Third, counterfeits provide price advantages because they are much more affordable than the genuine items. Researchers find price advantage to be a dominant reason for buying counterfeits (Albers-Miller 1999; Bloch, Bush, and Campbell 1993; Dodge, Edwards, and Fullerton 1996; Harvey and Walls 2003; Prendergast, Chuen, and Phau 2002). Value-conscious consumers are likely to develop counterfeit proneness mainly because of the savings resulting from the lower prices of counterfeits. They are engaged in counterfeit purchase behaviors when they experience price pressures. When they appreciate economic benefits of counterfeits, they do not see counterfeits as inferior products (Nia and Zaichkowsky 2000). Instead, they perceive purchase of counterfeits to be worthier and enhance societal welfare (Ang et al. 2001). Economic consequences influence the tolerance of illicit purchase behaviors by consumers (Dodge et al. 1996). A counterfeit provides a lower-quality, lower-price choice whereas a genuine item provides a higher-quality, higher-price choice. Buyers of counterfeits do not mind low quality and poor materials (Gentry et al. forthcoming; Prendergast et al. 2002). The consumer income level must be a primary driving force of counterfeit proneness, but nonincome factors may also contribute. For example, consumers will choose counterfeits when they feel a high risk in spending a lot of money to buy genuine items that have a high chance of being replaced by newer models or are too fashionable to last.

Fourth, consumers may not easily change their shopping patterns. Once consumers try counterfeits, they may be encouraged to buy them again because they are likely to depend on the previous shopping experience, although such product choice inertia or loyalty may diminish in the long run. Seetharaman, Ainslie, and Chintagunta (1999) find power in inertial choice behavior in which consumers make repeat same-purchase patterns. Consumers who become inert in one product category tend to be equally inert in other categories, and inert consumers are less sensitive to

marketing programs developed to change their choice behaviors. These findings about inertial shopping behaviors suggest that the more consumers experience counterfeits, the more they will prefer counterfeits. From the above discussions, therefore,

H5: Consumers of counterfeits will have stronger intention to buy counterfeit items than nonconsumers of counterfeits.

On the other hand, the more consumers experience counterfeit items the more they may also prefer genuine items. First, consumers may not consider counterfeits to be serious and ultimate purchases, but as a prelude to the purchase of genuine items (Gentry et al. 2001). Knowing counterfeits are an inferior version of a product, they try counterfeits from a need for experimentation as part of an ongoing information search for the high-priced genuine items, because counterfeits are low-financial risk products (Wee et al. 1995). Most consumers, once having experimented with counterfeits, would consider whether to buy the genuine items, making a tradeoff decision between price and quality.

Second, through enhancing their involvement with the brand, consumers of counterfeits will desire genuine items more than will nonconsumers of counterfeits because such experiences provide consumers a chance to vividly face the risks of consuming the counterfeits. According to d'Astous and Gargouri (2001), evaluations of counterfeits are negatively associated with product familiarity. Furthermore, counterfeit consumers may be embarrassed when other people notice their use of counterfeits. In particular, when they have high normative susceptibility (high expectations of what would impress others), they realize that compared to genuine items, counterfeits cannot make a good impression on others (Ang et al. 2001). In addition, counterfeit outlets are typically limited to nonconventional locations such as night markets, local weekend markets, street stalls, flea markets, open air markets, and smaller stores known for selling only counterfeits (Gentry et al. forthcoming). Most of them, except in some countries where legitimate stores have immunity to sell counterfeits, do not pay taxes on their revenues from counterfeits. The city of New York blames street vendors

for the loss of \$1 billion in tax revenues because of their trafficking in counterfeits (The New York Times 2005). When they are well aware of such legal problems, consumers may not be pleased with counterfeits. In addition, consumers of counterfeits are likely to find that counterfeits do not perform as well as the genuine item, that their designs are not as perfect as the genuine item, and that in case of product defects and dissatisfaction, counterfeits provide no consumer protection such as refunds, free repairs, and warranty programs. Through direct experiences with counterfeits, consumers of counterfeits are also able to immediately differentiate counterfeits from genuine items and therefore expose themselves to more fear of being embarrassed and losing their self-image in case others recognize their use of counterfeits. In summary, consumers of counterfeits realize the risks of consuming counterfeits more clearly than nonconsumers of counterfeits do. Accordingly, they would want to reduce the risks and develop more of a preference for genuine items than nonconsumers would, thanks to their direct experiences of inherent risks related to counterfeits. Therefore,

H6: Consumers of counterfeits will have stronger intentions of buying genuine items than nonconsumers of counterfeits.

The Effect of Genuine Item Experiences on Preference for Counterfeit and Genuine Items

We expect that experiencing genuine items is not likely to change the level of preference of counterfeits. First, consumers of genuine items are more rigorous status seekers (Mason 1998). They are highly likely to exclude counterfeits from their purchase consideration set after evaluating social risks involved with counterfeits. They ultimately lose interest in buying counterfeits. Thus, they do not have to change their already low preference level of counterfeits. Second, unlike consumers of counterfeits, consumers of genuine items are more likely to have enough financial ability to pay for genuine items. Unlike counterfeit buyers, they can afford both the prestige and product quality that genuine items offer (Albers-Miller 1999). Thanks to their financial capabilities,

price advantage may be less important than prestige and quality to them. Third, like consumers of counterfeits, consumers of genuine items may not easily change their shopping pattern. Once consumers buy genuine items, they are likely to continue the pattern to buy them again at the next shopping opportunity. Therefore,

H7: Consumers of genuine items will not show a different level of intention to buy counterfeit items from nonconsumers of genuine items.

We also expect that once consumers experience genuine items, they will prefer genuine items more than before because genuine items fulfill consumers' desire for higher social status through ostentatious display. First, consumers of genuine items would get higher status image confirmed by other observers who admire the genuine items being used. One strong reason of buying luxury genuine items stems from the desire of superiority over others (Mason 1998). The genuine item is a sign of their superiority. Thus, such consumption should be conspicuous to others and socially visible and wasteful. To status-seeking consumers, genuine items are an expression of their membership of an elitist society. Second, consumers would experience less cognitive dissonance as both quality and symbolic benefits of genuine items are satisfactory. They would also get higher satisfaction because the inherent quality of the genuine items matches the prestigious product image tangibly. More importantly, status-seeking consumers would be self-satisfied by their socially-inspired perceptions of how other consumers see them (Mason 1998). In summary, consumers will enhance their self-image by continuing to buy genuine items. Therefore,

H8: Consumers of genuine items will have a stronger intention to buy genuine items than nonconsumers of genuine items.

Buy a Counterfeit or a Genuine Item?

Every previous hypothesis indicates that overall consumers will prefer genuine items to counterfeits regardless of the type of their product experiences. But one question remains unanswered: How strongly will consumers prefer genuine items to counterfeits? We now reason

that the relative strength of genuine item preference over counterfeits may vary, depending on consumers' product experiences. First, as discussed previously, consumers who have experienced counterfeits develop preference for both counterfeits and genuine items although they prefer genuine items to counterfeits. Thus, they will show a smaller difference in preference between genuine items and counterfeits than will nonconsumers of counterfeits. Second, consumers who have experienced genuine items develop a much greater preference for genuine items than those who have not, while not changing the low level of preference for counterfeits. Thus, they will show a greater preference difference between genuine items and counterfeits than nonconsumers of genuine items. These comparisons lead us to the following hypotheses:

- H9: Consumers of counterfeit items will show a smaller purchase intention difference between genuine items and counterfeits than nonconsumers of counterfeits.
- H10: Consumers of genuine items will show a greater purchase intention difference between genuine items and counterfeits than nonconsumers of genuine items.

Two Studies

In Study 1, we test the hypotheses using a descriptive method in which cross-sectional data are collected and examined. Study 1 reveals broad trends of consumers towards genuine and counterfeit items. In Study 2, we test the hypotheses using a causal method in which subjects are asked to respond to various manipulated situations. Particularly, in Study 2, we examine the robustness of the findings from Study 1 under three experimental conditions by manipulating price levels of both genuine and counterfeit items.

Study 1 Method

Product Categories

We examined five different luxury fashion product categories--handbags, designer shoes, apparel (casual and formal), sunglasses, and jewelry (earrings, rings, and necklaces). We selected these products because they satisfy important aspects. First, the degree of counterfeiting is

enormous for these product categories. Second, they are consumer products with which consumers are familiar and whose counterfeit outlets are available to consumers. Third, nondeceptive counterfeits are frequently produced for these product categories (Grossman and Shapiro 1988). As we were interested in nondeceptive counterfeiting, the selected categories fit the purpose of our research. Fourth, functional and symbolic attributes of these product categories are well-balanced, and consumers recognize the high-end brands in the categories with which they hope to communicate their self-image, status, social class, prestige, and wealth.

We conducted a pretest to decide which specific brands to select for each of the five product categories by surveying female college students enrolled at major universities in Seoul, Korea. The country has an ideal market environment for a counterfeiting study because its consumers freely choose between genuine items and counterfeits. According to Korean Customs Service, Korea is second only to China in terms of counterfeit goods exports uncovered by U.S. customs officials. The U.S. customs indicated that out of 3,409 cases of counterfeits goods exports uncovered in 2000, Korea accounted for 595 cases, and most counterfeit fashion products by Korea were handbags and clothes. Fashion counterfeits made in Korea are often rated as the best forgeries available; some look exactly like genuine items and use the same brand names (Gentry et al. 2001). In addition, Korea, China, Thailand, and Taiwan make and supply about 70% of fake designer goods of the world (The Times 2002). Korea is also a great consumer of counterfeits. Although it is a member of the Organization for Economic Cooperation and Development, Korea has unfortunately developed a prevailing counterfeit culture by taking advantage of its citizens' past low-income status and the lack of stringent enforcement of trademark-protection laws.

On the questionnaire, we listed from each product category about 15 high-end brands whose genuine items were most popularly counterfeited and asked participants to check all brands whose fake products they had ever purchased. Out of a total of 500 participants, 54% had purchased one or

more counterfeits for the selected product categories. They had bought a typical counterfeit handbag for US \$65, a pair of counterfeit designer shoes for US \$61, counterfeit apparel for US \$181, counterfeit sunglasses for US \$118, and counterfeit jewelry for US \$62. Based on the collected data, we selected brands whose counterfeits were purchased by about a half of the participants who ever bought counterfeits of each product category. As summarized in Table 1, Prada and Louis Vuitton were selected for handbags; Salvatore Ferragamo and Gucci for designer shoes; DKNY, Prada, and Calvin Klein for apparel; Gucci and Chanel for sunglasses; and Agatha, Cartier, and Tiffany for jewelry. In Study 1, if one responded "yes" to a question asking about the experience with counterfeits of any of the selected brands, the participant was classified as a consumer of counterfeits for the particular product category.

***** Insert Table 1 About Here *****

Measures

In each of the five product categories, three single-item measures (i.e., actual purchase experience, actual ownership experience, and purchase intention) were asked for both counterfeit and genuine items of the brands selected from the pretest. The measures for counterfeits and their corresponding genuine items were identically worded. Specifically, purchase and ownership experience of a counterfeit was measured by a yes-no item each: "Have you ever purchased any of the following counterfeit [luxury fashion brands] and have you ever owned any of the following counterfeit [luxury fashion brands]?" Purchase and ownership experience of a genuine item was also measured through a question each: "Have you ever purchased any of the following genuine [luxury fashion brands] and have you ever owned any of the following genuine [luxury fashion brands]?" Purchase intention of a counterfeit was measured by a 7-point item, anchored with "very unlikely" as 1 and "very likely" as 7: "How much are you willing to purchase any of the following counterfeit [luxury fashion brands]?" Purchase intention of a genuine item was measured likewise.

Participants and Data Collection

We selected Korea for Study 1. Female students at major universities in Seoul, Korea, voluntarily participated. With professors' permission, interviewers visited their classes on the scheduled dates and asked the students to answer the questionnaire. A total of 400 students completed a self-administered, paper-and-pencil questionnaire. Elimination of incomplete responses left 369 eligible responses for analysis. Participants' ages ranged from 17 to 44, with an average of 21.4 and standard deviation of 2.9. Their monthly personal disposable income ranged from US \$7 to US \$900, with an average of US \$318 and standard deviation of US \$137. The participants' counterfeit and genuine item 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.

A student sample is often considered inadequate in consumer research because of its poor representation of the general population. However, the use of students fits the purpose of our study. First, female college students in Korea are primary consumers who actively buy and consume both counterfeits and genuine items in the selected product categories. In Korea, women between the ages of early twenties are called the "Luxury Generation" because they identify themselves with expensive brand-name genuine items. Second, for theory-testing research, a student sample is strongly recommended. A student sample as a maximally homogeneous sample has important advantages for theory validation research (Calder, Philips, and Tybout 1981). In our study, students were highly involved in the selected product categories as buyers, consumers, and influencers.

Study 1 Results

Testing the research hypotheses repeatedly required comparisons of purchase intention of genuine and counterfeit items between consumers and nonconsumers of each type of product.

Participants were provided the brand names previously selected in the pilot study and regarded as

having had product experience if they answered they had either purchased or owned any of the brands. This way, participants were classified into four groups for each product category: nonconsumers of counterfeits, consumers of counterfeits, nonconsumers of genuine items, and consumers of genuine items.

The first set of hypotheses (H1 through H4), that genuine items are preferred to counterfeits, was tested for each of purchase and ownership experiences by computing the purchase intention difference between genuine item and counterfeits. Overall, H1 though H4 were supported. First, as summarized in Table 2, the hypothesis H1 (Nonconsumers of counterfeits prefer genuine items to counterfeits) was supported at the 0.0001 level for each of the five product categories. Second, as shown in Table 2, H2 (Consumers of counterfeits) was supported. But it was weakly or directionally supported for designer shoes, apparel, and sunglasses. This weak support must have occurred because, as discussed in later hypotheses (H5 and H6), consumers of counterfeits simultaneously develop higher preference for both counterfeits and genuine items than nonconsumers of counterfeits. Third, as reported in Table 3, H3 (Nonconsumers of genuine items was supported at the 0.0001 level for every product category. Fourth, H4 (Consumers of genuine items) was also supported at the 0.0001 level for every product category.

***** Insert Tables 2 and 3 About Here *****

The effect of counterfeit experiences was tested through another set of t-tests. First, as shown in Table 2, H5 (Consumers of counterfeits prefer counterfeits more than nonconsumers of counterfeits) was, except in sunglasses (p < 0.01), strongly supported at the 0.0001 level for every other product category. Second, as also reported in Table 2, H6 (Consumers of counterfeits prefer genuine items more than nonconsumers of counterfeits) was supported for handbags, designer shoes, and jewelry at least at the 0.05 significance level. But it was not supported for apparel and

sunglasses. Thus, depending on product categories, consumers of counterfeits showed higher or no different purchase intention for genuine items than nonconsumers of counterfeits did.

The effect of genuine item experiences was tested through another set of t-tests and reported in Table 3. First, H7 (There is no difference in intention to buy counterfeit items between consumers and nonconsumers of genuine items) was supported, as the series of mean difference t-tests did not produce any significant difference in counterfeit preference between consumers and nonconsumers of genuine items. The largest t-value was merely 1.24 (jewelry). Second, H8 (Consumers of genuine items prefer genuine items more than nonconsumers of genuine items) was strongly supported at the 0.0001 level for every product category.

The last set of hypotheses was significantly supported as summarized in Table 4. The preference difference was computed by subtracting counterfeit preference from genuine item preference for each product category. Regardless of counterfeit and genuine item experiences, participants showed higher preference for genuine items over counterfeits, as indicated in the positive mean scores inside Table 4. Then, that difference (genuine item minus counterfeit purchase intention) was compared between consumers and nonconsumers of each of counterfeits and genuine items. First, H9 (Consumers of counterfeits show a smaller preference difference between genuine items and counterfeits than nonconsumers of counterfeits) was supported as indicated in significant and positive t-values. Second, H10 (Consumers of genuine items show a greater preference difference between genuine items and counterfeits than nonconsumers of genuine items) was strongly supported as indicated in significant and negative t-values.

***** Insert Table 4 About Here *****

Study 2 Method

Based on the findings from Study 1, it could be concluded that experience with counterfeits enhances the demand for genuine items, not cutting into genuine item sales. However, the cross-

sectional survey method used in Study 1 was not adequate enough to make such a strong argument due to potential social desirability biases for legal, ethical, and self-esteem reasons, which are commonly inherited in a survey method. To eliminate those biases and confirm the findings of Study 1, we additionally constructed Study 2, which was an experiment in the context of a survey. In Study 2, the prices of the counterfeit and genuine items were manipulated. This, along with an attempt to measure how preferences vary with experiences with counterfeits and genuine items, might give the information needed to make a more convincing case about the argument put forth in Study 1: counterfeits do not decrease, but increase, the sales of genuine items. We manipulated price because it is known as one of the crucial factors dividing counterfeit and genuine item buyers. Studies find that consumers select a counterfeit when it has an overwhelming price advantage over the genuine item (Bloch et al. 1993; Harvey and Walls 2003).

Experimental Design and Data Collection

The design was 2 (brand name: Prada and Louis Vuitton; within) by 2 (price of the genuine handbag; \$1,000 and \$500; between) by 4 (price of the counterfeit handbag; no counterfeit presented, 5% of the genuine handbag price, 10%, and 20%; between). The luxury handbag category was selected in the study as its counterfeits were widely purchased. Specifically, Prada and Louis Vuitton were selected as their counterfeits were most popularly purchased. The specific price of the genuine item and its counterfeit were selected based on Study 1 data. In this experimental design, purchase intention of a counterfeit or a genuine item is a function of brand name and price. But the primary purpose of Study 2 was not to test the effect of brand name and price but to test the robustness of the findings of Study 1 in more realistic conditions where consumers shop with market information such as brand name and price.

Table 5 shows the experimental design and the number of participants for each design scenario. A new group of female college students in Korea was contacted by interviewers we hired,

and they voluntarily participated. Participants were first asked to read the introduction on the first page of the survey in which the general purpose of the study was briefly described. Then they were asked to provide their purchase experiences with last two years for the genuine and counterfeit handbags of the two brands selected, along with demographic information. On the second page, participants were asked to read one of the eight experimental scenarios for Prada. The third scenario version, as shown in Table 5, for example, read in big letters, "Assume that you see the two following products while shopping: a genuine Prada handbag for \$1,000 and its counterfeit version for \$100." Then they were asked to reply to two questions of purchase intention: "For how much are you willing to purchase this genuine (counterfeit) handbag?" The 7-point response choices were anchored in "very unlikely" as 1 to "very likely" as 7 and "not at all" as 1 to "a lot" as 7. Finally, they were asked to move on to the third page of the survey for the task with Louis Vuitton handbags.

***** Insert Table 5 About Here *****

Overall, 420 consumers participated in the experiments. Each design scenario was responded to by 44 to 59 participants, which showed no significant difference in frequency. Respondents' ages ranged from 18 to 40, with an average of 21.5 and standard deviation of 2.6. Their monthly personal disposable income ranged from US \$50 to US \$1,200, with an average of US \$330 and standard deviation of US \$140. Those who purchased a genuine luxury handbag paid US \$554 on average for Prada and US \$754 for Louis Vuitton.

Study 2 Results

The ten hypotheses of Study 1 were tested with Study 2 data by conducting the same series of t-tests of Study 1. To test the hypotheses, 420 participants were grouped, depending on whether or not they purchased counterfeit and/or genuine luxury handbags for last two years, as consumers (18.6%) and nonconsumers (81.4%) of counterfeit handbags as well as consumers (32.9%) and nonconsumers (67.1%) of genuine luxury handbags. The results of the analysis are reported in

Tables 6, 7, and 8. The pooled sample, rather than individual samples of different scenarios, was primarily used to test hypotheses because it captures the overall trend across different experimental conditions and remedies the small sample size problem that may occur when particular experimental conditions are separately analyzed.

As reported previously, purchase intention was the mean score of two items. It achieved a very satisfactory reliability ranging from 0.90 to 0.97 across versions of the survey. The findings of Tables 6, 7, and 8 can be summarized as follows. As shown in Table 6, H11 (Nonconsumers of counterfeits prefer genuine items to counterfeits) was supported, which was consistent with the result of Study 1. H12 (Consumers of counterfeits) was not supported, which was inconsistent with the result of Study 1. This clearly reveals the important effect of price on counterfeit purchases. When consumers are given the market information that the price of a counterfeit handbag ranges from only 5% to 20% of the price of the genuine item and that its genuine counterpart costs \$500 or \$1,000, consumers are not willing to buy the genuine item over the counterfeit. However, it is a positive aspect that, as evidenced in insignificant t-values (1.08 for Prada and 0.61 for Louis Vuitton), consumers of counterfeits did not show a higher willingness to buy counterfeits over genuine items. As reported in Table 7, H13 (Nonconsumers of genuine items) was supported in Louis Vuitton but not in Prada. This mixed result shows that nonconsumers of genuine items are concerned about the high price of the genuine item, making them hesitate to select the genuine item. But that concern of price did not appear in Louis Vuitton, implying the strong brand equity can be the source of overcoming the price. H14 (Consumers of genuine items) was supported, which was consistent with the result of Study 1.

***** Insert Tables 6 & 7 About Here *****

As reported in Table 6, H15 (Consumers of counterfeits prefer counterfeits more than nonconsumers of counterfeits) was supported in the pooled sample, which was consistent with the

result of Study 1. But the hypothesis did not hold in some experimental conditions. This might have occurred because the significantly low price of the counterfeit strongly reminded consumers of various risks involved with counterfeits. H16 (Consumers of counterfeits prefer genuine items more than nonconsumers of counterfeits) was not supported at all, which was inconsistent with the result of Study 1. This strongly implies that both consumers and nonconsumers of counterfeits are concerned about the expensive price of the genuine item.

Tables 7 shows that H17 (Consumers and nonconsumers of genuine items do not show a different level of preference of counterfeit items) was supported, showing consistency with Study 1. But in three of 12 experimental conditions, nonconsumers of genuine items preferred counterfeits to genuine items, which again confirms the tendency that when they learn that the genuine item is too expensive they resort to the counterfeit. So, relative price is very important. But if the economy improves, the purchase of counterfeits will lead to the purchases of the genuine items. H18 (Consumers of genuine items prefer genuine items more than nonconsumers of genuine items) was supported, which was consistent with the result of Study 1. It is noteworthy that consumers of genuine items were not affected by the presence of counterfeits and certainly did not mind the huge price gap between counterfeits and genuine items. They kept strong loyalty to genuine items.

As reported in Table 8, both H19 (Consumers of counterfeits show a smaller preference difference between genuine items and counterfeits than nonconsumers of counterfeits) and H20 (Consumers of genuine items show a larger preference difference between genuine items and counterfeits than nonconsumers of genuine items) were supported, which was consistent with the result of Study 1. Despite the hypotheses being supported, the purchase intention difference was negative among counterfeit consumers whereas it was positive among all other types of consumers. In Study 1, as shown in Table 4, even consumers of counterfeits preferred genuine items to counterfeits, producing a positive purchase intention difference. But when the price information was

provided in Study 2, they clearly chose counterfeits over genuine items. Thus, it can be predicted that consumers of counterfeits pay attention to the price difference between genuine items and counterfeits. They may do so due to lower income than other types of consumers. Another reason of such a choice may come from the tradeoff they compute between the price and the product benefits. For example, if they pursue short-lasting benefits such as playfulness, novelty, and fashionability but not durability and material quality, they would not spend a lot for genuine items.

***** Insert Table 8 About Here *****

Study 2: Revenue Gains versus Losses in Presence of Counterfeits

As shown in the results of data analysis of Study 1 and 2, the presence of counterfeits may enhance the demand for the genuine items. This argument can be proved by showing the positive net revenue gains of genuine items. To compute the net gains, we used the purchase intention of the genuine item and the counterfeit as a proxy of revenue gains and losses of the genuine item, respectively. Then, the net gains are computed as [(each individual consumer's purchase intention of the genuine handbag) – (the consumer's purchase intention of its counterfeit version)]. Table 9 shows the results. When all participants were considered, the net gains were positive for both Prada (p < 0.01) and Louis Vuitton (p < 0.0001). When those who had bought neither counterfeits nor genuine handbags were excluded, participants (that is, those who had ever purchased either a counterfeit handbag or a genuine handbag) showed larger net gains for both brands when all participants were considered. Obviously, this result is good news to luxury fashion product manufacturers and distributors.

Table 9 shows net revenue gains among different types of consumers. The net gains were significantly positive among consumers who bought genuine handbags only or at least the same number of genuine handbags as the counterfeits. They showed great loyalty to genuine items even when the price of a counterfeit was at most 15% of the genuine item. This confirms d'Astous and

Gargouri's (2001) finding that evaluations of counterfeits are negatively associated with brand loyalty. However, the net gains were negative among consumers who bought counterfeit handbags only or more counterfeits than genuine handbags. The price information in the experiment made them turn away from genuine items.

***** Insert Table 9 About Here *****

To estimate more succinctly the impact of relevant factors on net revenue gains, we conducted an ANOVA. The analyzed factors were consumer type, brand name, price of the genuine item, price of the counterfeit, and all the possible interaction terms of the factors. In this ANOVA analysis, only consumers of genuine and counterfeit handbags were analyzed. Qualified participants (n = 245) were divided into two types: genuine versus counterfeit handbag consumers. If a participant bought more genuine (counterfeit) handbags than counterfeit (genuine) ones, she was classified as a genuine (counterfeit) handbag consumer. The monthly disposable income was also analyzed as a covariate factor because income is relevant to luxury product consumption. The average of the monthly disposable income was US \$315 (SD = \$97) and US \$407 (SD = \$164) among counterfeit and genuine handbag consumers, respectively, confirming that counterfeit consumers have lower income than genuine product consumers. The three dependent variables in ANOVA were purchase intention of genuine handbags as a proxy of revenues of genuine items, purchase intention of counterfeit handbags as a proxy of revenue losses of genuine items, and purchase intention difference as a proxy of net gains.

***** Insert Table 10 About Here *****

As reported in Table 10, all three ANOVA results were significant at the 0.0001 level and produced a high R-square ranging from 0.25 and 0.36. Three observations are noteworthy to mention. First, the consumer type was the determinant of sales with the largest impact across ANOVAs. Consumers of genuine items showed a positive purchase intention difference (Mean =

1.56, SD = 2.18) whereas consumers of counterfeits showed a negative difference (Mean = -0.78, SD = 2.38). This shows that consumers of counterfeits in fact choose counterfeits, which was inconsistent with the result of Study 1. However, consumers of genuine handbags showed strong loyalty to genuine items despite the presence of counterfeits and the price information. Second, personal disposable income mattered in purchasing genuine items, but not counterfeits. This implies that only high-income consumers purchase genuine items while the income level does not matter in purchasing counterfeits. In a sense, this is good news to manufacturers because income clearly divides consumers of genuine items from consumers of counterfeits. However, this can be bad news because even consumers of high income do not mind buying counterfeits. Third, the brand name and the price of the genuine item were the most important determinants of the purchase of genuine items. Consumers preferred a lower price and one brand name over the other, following the fundamental supply-demand economics and brand equity theory. But price and brand name did not matter to the purchase intention of counterfeit items. This might suggest that purchase of counterfeits should be explained by noneconomics reasons such as novelty, playfulness, hedonism, and experimental trial.

Discussions and Implications

A customer says 'Luxury is offered at all levels, and many different price points: from a piece of chocolate to a handbag, they must have the very best that's made. That satisfaction can't be replaced by frauds'' and Marshal Cohen, chief retail analyst for the NPD Group, says ''[A counterfeit] might be affecting the discounters or the novelty stores. If you shop on the street, you know it's not real, you know it's going to fall apart, that it's disposable. You're buying for the fun of it'' (The New York Times 2005).

Our studies show that loyalty of consumers of genuine items does not diminish at all even in the presence and price information of counterfeits. This result is consistent with Nia and Zaichkowsky's (2000): counterfeits do not decrease the demand for genuine luxury brand name products and the value, satisfaction, and status of genuine items are not decreased by the availability of counterfeits. Consumers of genuine items showed a stronger intention to purchase genuine items than counterfeits. This implies that counterfeits function as free advertising and promotion which are cheaper than free samples, increasing brand familiarity and involvement in addition. On the contrary to manufacturers' fear, counterfeits do not destroy consumers' good faith in their brand names. Thus, manufacturers need not worry about consumers of genuine items, who remain loyal despite the rapidly growing circulation of counterfeits. Consumers of counterfeits significantly preferred genuine items to counterfeits, too, in Study 1 where no other information was given, but they preferred genuine items and counterfeits equally or sometimes counterfeits to genuine items in Study 2 where information of price and brand name were provided.

Two empirical studies (a cross-sectional survey for Study 1 and an experimental design for Study 2) were conducted to examine the effect of experiences with counterfeits on the intention of buying genuine products. Three major results were commonly found in both studies. First, consumers preferred genuine items to counterfeits, regardless of their product experiences. Specifically, nonconsumers of counterfeits (H1 and H11), nonconsumers of genuine items (H3 and H13), and consumers of genuine items (H4 and H14) preferred genuine items to counterfeits as measured in purchase intention. This result is good news for manufacturers of genuine items because, unless consumers do have experience with counterfeits, they will be more likely to purchase genuine items rather than counterfeits.

Second, consumers of genuine items showed the same level of intention of buying counterfeits as nonconsumers of genuine items (H7 and H7) but a stronger intention of buying genuine items than nonconsumers of genuine items did (H8 and H18). In addition, consumers of genuine items showed a greater purchase intention difference between genuine items and

counterfeits than nonconsumers of genuine items did (H10 and H20). In summary, consumers of genuine items remained strongly loyal to genuine items, not developing an interest in counterfeits, even when knowing the price advantage of counterfeits. Genuine item experiences made consumers continue to purchase them without being tempted to buy counterfeits.

Third, consumers of counterfeits showed a stronger intention of buying counterfeits than nonconsumers of counterfeits did (H5 and H15). Once consumers tried counterfeits, they were attracted to the benefits of counterfeits. As a result, they showed a smaller difference in preference between genuine items and counterfeits than nonconsumers of counterfeits did (both H9 and H19 supported). The difference was positive in Study 1, but changed to negative in Study 2. This change of the impact sign between two studies reveals that although consumers of counterfeits generally preferred genuine items to counterfeits, they reversed their preferences when they were evoked the price advantage of counterfeits.

However, Study 1 and 2 produced a couple of different results. H2 and H6 of Study 1 were supported but H12 and H16 (their corresponding hypotheses of Study 2) were not supported.

Specifically, consumers of counterfeits significantly preferred genuine items to counterfeits in Study 1 (H2), but when price information was provided in Study 2, the preference of genuine items diminished, resulting in no significant difference in the preference of counterfeits (H12 not supported). In addition, H6 (Consumers of counterfeits would show a stronger intention to buy genuine items than nonconsumers of counterfeits would) were supported in Study 1 but not in Study 2 with price information given (H16 not supported). These inconsistent results must be what manufacturers should worry about because consumers of counterfeits may not be consumers of genuine items in the future as long as they enjoy the price advantage of counterfeits. Unless they can afford genuine items, they are likely to stay with counterfeits. Study 2 data showed that consumers of counterfeits made a significantly lower income than consumers of genuine items did.

As reported in Table 10, further analysis of Study 2 data showed that both the expensive price of a genuine item and the low income of a consumer together caused the consumer not to buy the genuine item. This confirms that income matters in buying genuine items. Thus, when consumers of counterfeits can afford genuine items, they may be very likely to buy them. As consumers' age and their incomes increase, they will very likely make transition from counterfeits to the genuine. Then, counterfeits actually work as a promotion.

It was a consoling fact, though, that according to an additional analysis of Study 2 data (as shown in Table 9), net revenue gains of genuine items were positive despite the presence of counterfeits. Although the net gains were negative among heavy counterfeit consumers, they were positive among all other types of consumers such as light counterfeit consumers, heavy genuine item consumers, and nonconsumers of luxury products.

Managerial Implications

Counterfeit consumer behavior is very important to manufacturers, distributors, and public policy makers. The purpose of this research was to examine whether luxury fashion apparel counterfeits function as promotion to increase sales of genuine items, as has been proven in the issue of computer software piracy. Our studies showed the answer depends on consumer type and available market information. If a consumer buys more counterfeits than genuine items, the consumer will buy counterfeits when price information is available. On the other hand, if a consumer buys more genuine items than, or the same amount as, counterfeits, the consumer does not mind the price gap between the genuine item and its counterfeit version. She is willing to buy the genuine one over the counterfeit. Thus, the following ideas can be implemented to increase further net gains of genuine items in the midst of thriving counterfeiting:

First, to make consumers of counterfeits switch from counterfeits to genuine items, marketers should be able to convince consumers of counterfeits that the benefits of purchasing

genuine items outweigh those of counterfeits. For example, to achieve the goal, not only fashionability but also durability and material quality of the product should be communicated to consumers because it is easy to copy the fashionability but not the durability and material quality. When genuine items last long physically and do not wear out easily, their expensive price will be balanced well with their economic values. In addition to durability, carefully planned obsolescence for products can be implemented to make consumers repeatedly buy the products, which would satisfy consumers' desire for fashions and the firm's profitability.

Second, marketers should make the style of the designs of genuine items last for a reasonable length of time, not changing them too quickly or too radically. Although fashionability, stylishness, and popularity are important characteristics of luxury fashion items, fast and dramatic changes of a design make durability and high quality materials less important, encouraging consumers to buy counterfeits to live up with fast changing new designs. But when a design or a major theme of it fades slowly, the expensive price of the genuine item is worth it because the consumer will feel no need to try counterfeits, possessing genuine items for a long time. A brand name should connote a particular fashion style. Thus, even when a change of the design needs to be made, key patterns and attributes by which consumers differentiate the brand from others must remain unchanged so that consumers could wear old designs without significant embarrassment from having out-dated fashions. It should be noted buying a counterfeit or a genuine item will depend on the purpose of product usage. Consumers would consider both counterfeits and the genuine for themselves, but probably genuine items as a gift for someone special and counterfeits as a souvenir gift from a trip for multiple others.

Third, marketers should increase consumers' perceived risks of buying and consuming counterfeits. As consumers buy luxury goods to satisfy a desire for symbolic meanings such as social and financial status, recognition, and superiority, they would stay away from counterfeits

when convinced they cannot impress others with counterfeits (Nia and Zaichkowsky 2000). One of the best methods must be to appeal to the law because the root of the counterfeiting problem stem from the willingness of consumers to purchase counterfeits (Prendergast et al. 2002). For example, the recording industry has learned that legal approaches were the most effective method of stopping online music piracy and to alert consumers to the illegal sharing of copyrighted songs. When individuals are being sued for music piracy, consumers realize the high risk of illegal downloading most vividly. Unfortunately, in counterfeiting, copyright laws punish the supply side of it, such as creators, manufacturers, distributors, dealers, and sellers of counterfeits, but rarely the demand side such as buyers and owners. However, in an experiment, Harvey and Walls (2003) found that consumers would not buy a counterfeit if they have a high chance of being detected and prosecuted for purchasing a counterfeit by law enforcement authorities. In conclusion, they called more stringent enforcement of anti-counterfeiting legislation both of the buyers and of the sellers. Although bringing counterfeit consumers to court is not feasible under current laws, diligent investigation and prosecution of copyright law violators could work as a very effective tool to teach consumers that counterfeits are illicit products and buying them is a socially undesirable behavior (Albers-Miller 1999). Many firms already use this method. For example, in 2004, Louis Vuitton spent more than \$16 million fighting counterfeits (The Economist 2005). Such efforts will let consumers learn that counterfeiting is a criminal activity that damages legitimate foreign as well as domestic manufacturers and retailers. Another reason to investigate and prosecute counterfeiters diligently is that the quality of some counterfeits is so meticulous that no one can tell the difference (Time 2005). When there is no difference in appearance and the quality is near perfect, consumers will not perceive any serious social risks such as embarrassment before others, which encourages them to continue to purchase fakes (Albers-Miller 1999). Therefore, governments should crack down on counterfeiters who manufacture and distribute counterfeits. Recently, responding to the

U.S. pleas, China agreed to file criminal charges against more people accused of product counterfeiting and piracy (Business Week 2005b). Such global cooperation is inevitable and effective in reducing global counterfeit manufacturing and trade, in particular, in this e-commerce era when circulation and sales of counterfeits have never been easier to consumers over the world (Gentry et al. forthcoming). A crackdown on counterfeiting and the protection of intellectual property should be a top agenda in global trade negotiations (Business Week 2005a).

Fourth, with aggressive legal measures against counterfeiters, other efforts should be simultaneously added to discourage consumers from buying counterfeits. For example, an advertising campaign can be launched to educate consumers about the social, performance, and financial risks of counterfeits. Through the campaign, consumers may develop the understanding that the prestige they buy from counterfeits cannot be true prestige with a variety of risks involved. In addition, consumers should be informed of how to identify counterfeits. Such knowledge would cause counterfeit buyers to perceive high social risks involved with counterfeits and fail in impressing others.

Fifth, to remove the price advantage of counterfeits, which is a major drive of buying a counterfeit, marketers of genuine items can expedite the trial and adoption of genuine items in particular among counterfeit consumers by developing affordable versions of genuine items. As found in our study, once consumers try genuine items, they very likely become consumers of genuine items more quickly. Affordable versions may function as a bridge aiding consumers to gradually switch from counterfeits to genuine items. Of course, however, this strategy could encounter at least two serious problems: an erosion of the brand's reputation and the cannibalization of the more expensive genuine items. In a worse scenario, the affordable versions can be seen as counterfeits. To avoid these problems, a careful design of the product is required. For example, the affordable versions should distinguish themselves from high-end genuine items while keeping the

key brand attributes. One practical idea is to from a long-term strategy target young consumers, such as teens and college students, who have lower income and welcome more youthful designs.

Thus, the items targeting youth would be more affordable in price and more youthful in design.

Research Implications

Using Study 2 data, we computed the revenue losses and gains of genuine items against counterfeits, treating purchase intention as a proxy of revenues. Although purchase intention is strongly linked to actual purchase, future research needs to be done to examine purchase behavior directly. One idea is a choice task in which consumers are asked to make a purchase choice between a genuine item and its counterfeit version under an experimental setting. Such a choice task may create a more realistic situation for consumers where they buy only one item, real or fake, at a time. And the task will provide data that reveal more dynamic choice and switching behaviors between genuine items and counterfeits.

In Study 2, although we also manipulated brand name, we focused on the impact of prices of counterfeits and genuine items. Price turned out to be a powerful element that influences counterfeit buying behaviors. But, future research needs to investigate other factors that are suspected of influencing counterfeit purchases. Examples are personal factors such as consumer ethics, consumer ethnocentrism and animosity towards foreign countries (if the genuine item is foreign), materialism, vanity, self-esteem, perceived social class, product involvement, and income. Environmental factors include the degree of counterfeit product availability, corruption of the society, national culture, societal norms, penetration rate of counterfeits, social desirability of counterfeit consumption, enforcement of copyright laws, and presence of social awareness campaigns against counterfeits; and product factors are brand equity, brand loyalty, band name awareness, objective quality evaluations, brand reputation, product designs, fashionability, market share, and the amount of advertising spending. As manufacturers know better which factors drive consumers to select

counterfeits over genuine items and vice versa, they will be able to formulate more effective measures against counterfeit consumption behaviors.

We conducted cross-sectional studies, but future research needs longitudinal studies for individual consumers which can reveal whether or not consumers develop more responsible consumption behaviors as they get older and earn a different level of income. In addition, future research needs to be done to test whether the results of this study can be generalized to mature consumers who are more likely to afford to buy genuine items. Future research also needs to collect and analyze multi-national data. In this study, only Korean consumers were studied; whether non-Koreans in other countries show very different behaviors than do Koreans needs to be investigated. In a cross-cultural study, mature consumers should be examined because the youth culture is globally homogeneous in many aspects, but mature consumers are not, showing distinct differences.

REFERENCES

Aaker, David A. (1991), Managing Brand Equity. New York: The Free Press.

Albers-Miller, Nancy D. (1999), "Consumer Misbehavior: Why People Buy Illicit Goods," *Journal of Consumer Marketing*, 16 (3), 273-287.

Ang, Swee Hoon, Peng Sim Cheng, Elison A.C. Lim, and Siok Kuan Tambyah (2001), "Spot the Difference: Consumer Responses towards Counterfeits," *Journal of Consumer Marketing*, 18 (3), 219-235.

Babin, Barry J., William R. Darden and Mitch Griffin (1994). "Work and/or Fun: Measuring Hedonic and Utilitarian Shopping Value," *Journal of Consumer Research*, 20 (March), 644-656.

Bloch, Peter H., Ronald F. Bush, and Leland Campbell (1993), "Consumer 'Accomplices' in Product Counterfeiting: A Demand-Side Investigation," *The Journal of Consumer Marketing*, 10 (4), 27-36.

Business Week (2005a), "The Counterfeit Catastrophe: Curbing Piracy is as Urgent as Taking Down Trade Barriers," February 7.

Business Week (2005b), "China to Prosecute More Product Pirates," July 11.

Calder, Bobby J., Lynn W. Philips, and Alice M. Tybout (1981), "Designing Research for Application," *Journal of Consumer Research*, 8 (September), 197-207.

Chaudhury, Peggy E. and Michael G. Walsh (1996), "An Assessment of the Impact of Counterfeiting in International Markets: The Piracy Paradox Persists," *Columbia Journal of World Business*, 31 (Fall), 34-48.

Collins-Dodd, Colleen, and Judith Lynne Zaichkowsky (1999), "National Brand Responses to Brand Imitation: Retailers versus Other Manufacturers," *Journal of Product and Brand Management*, 8 (2), 96-105.

Conner, Kathleen Reavis and Richard P. Rumelt (1991), "Software Piracy: An Analysis of Protection Strategies," *Management Science*, 37 (February), 125-139.

d'Astous, Alain, and Ezzdine Gargouri (2001), "Consumer Evaluations of Brand Imitations," *European Journal of Marketing*, 35 (1/2), 153-167.

Dawar, Niraj and Philip Parker (1994), "Marketing Universals: Consumers' Use of Brand Name, Price, Physical Appearance, and Retailer Reputation as Signals of Product Quality," *Journal of Marketing*, 58 (April), 81-95.

Dodge, H. Robert, Elizabeth A. Edwards, and Sam Fullerton (1996), "Consumer Transgressions in the Marketplace: Consumers' Perspectives," *Psychology and Marketing*, 13 (8), 821-835.

The Economist (2005), "What to Do if You Can't Afford the Real Thing?" in *Intelligent Life*, Summer.

The Financial Times (2005), "Sharp Rise in Swoops on Pirate Goods Counterfeiting," February 17.

Gentry, James W., Sanjay Putrevu, Clifford Shultz, II (forthcoming), "The Effects of Counterfeiting on Consumer Search," forthcoming in *Journal of Consumer Behaviour*.

Gentry, James W., Sanjay Putrevu, Clifford J. Shultz, II, and Suraj Commuri (2001), "How Now Ralph Lauren? The Separation of Brand and Product in a Counterfeit Culture," *Advances in Consumer Research*, 28, 258-265.

Givon, Moshe, Vijay Mahajan, and Eitan Muller (1995), "Software Piracy: Estimation of Lost Sales and the Impact on Software Diffusion." *Journal of Marketing*, 59 (January), 29-37.

Green, Robert T. and Tasman Smith (2002), "Executive Insights: Countering Brand Counterfeiters," *Journal of International Marketing*, 10 (4), 89-106.

Grossman, Gene M., and Carl Shapiro (1988), "Foreign Counterfeiting of Status Goods," *Quarterly Journal of Economics*, 103 (February), 79-100.

Harvey, Patrick J. and W. David Walls (2003), "Laboratory Markets in Counterfeits Goods: Hong Kong versus Las Vegas," *Applied Economics Letters*, 10, 883-887.

Howard, John A. (1994), *Buyer Behavior in Marketing Strategy*, 2nd ed. Englewood Cliffs, NJ: Prentice Hall.

Keller, Kevin Lane (1993), "Conceptualizing, Measuring, and Managing Customer-Based Brand Equity," *Journal of Marketing*, 57 (January), 1-22.

Lichtenstein, Donald R., Nancy M. Ridgway, and Richard G. Netemeyer (1993), "Price Perceptions and Consumer Shopping Behavior: A Field Study," *Journal of Marketing Research*, 30 (May), 234-245.

Maloo, Manny C. and William P. Darrow (2001), "Potential Liabilities of U.S. Airlines: Management Concerns for Cost and Consequences of Code Sharing Alliances in Civil Aviation," *American Business Review*, 19 (June), 121-129.

Maltz, Elliot and Vincent Chiappetta (2002), "Maximizing Value in the Digital World," *Sloan Management Review*, 43 (Spring), 77-84.

Mason, Roger (1998), *The Economics of Conspicuous Consumption: Theory and Thought Since* 1700. Cheltenham, United Kingdom: Edward Elgar Publishing.

McCarthy, J. Thomas (2004), *McCarthy's Desk Encyclopedia of Intellectual Property, Third Edition*. Washington, DC: Bureau of National Affairs.

The New York Times (2005), "On the Streets, Genuine Copies (And a Few Originals)." May 26.

Nia, Arghavan, and Judith Lynne Zaichkowsky (2000), Do Counterfeits Devalue the Ownership of Luxury Brands?" *Journal of Product and Brand Management*, 9 (7), 485-497.

Nowlis, Stephen M. and Itamar Simonson (1997), "Attribute-Task Compatibility as a Determinant of Consumer Preference Reversals," *Journal of Marketing Research*, 34 (2), 205-218.

Prendergast, Gerald, Leung Hing Chuen, and Ian Phau (2002), "Understanding Consumer Demand for Non-Deceptive Pirated Brands," *Marketing Intelligence and Planning*, 20 (7), 405-416.

Seetharaman, P. B., Andrew Ainslie, and Pradeep K. Chintagunta (1999), "Investigating Household State Dependence Effects Across Categories," *Journal of Marketing Research*, 36 (November), 488-500.

Time, International Asia Edition (2005), "Faking It: Beijing's Inability to Curb Rampant Intellectual-Property Theft Is Infuriating Its Trading Partners," June 13.

The Times (London) (2002), "Handbags Drawn in the War over Fakes," July 18.

The U.S. House of Representatives (2005), *Stop Counterfeiting in Manufactured Goods Act*. Passed on May 23.

Wechsler, Jill (2002), "WHO Joins Fight against Counterfeit Pharmaceuticals," *Pharmaceutical Executive*, 22 (March), 25.

Wee, Chow-Hou, Soo-Jiuan Tan, and Kim-Hong Cheok (1995), "Non-Price Determinants of Intention to Purchase Counterfeits Goods," *International Marketing Review*, 12 (6), 19-46.

Wilke, Ricky, and Judith Lynne Zaichkowsky (1999), "Brand Imitation and Its Effects on Innovation, Competition, and Brand Equity," *Business Horizons*, 42 (November-December), 9-18.

Yoo, Boonghee, Naveen Donthu, and Sungho Lee (2000), "An Examination of Selected Marketing Mix Elements and Brand Equity," *Journal of the Academy of Marketing Science*, 28 (2), 195-211.

Table 1
Study 1: Counterfeit Brands Selected

Luxury Fashion		Percent of Participants Who Ever Purchased	
Product Category	Brands	Counterfeits of the Brands (n = 500)	In Total
Handbags	Prada Louis Vuitton	45.0% 19.7%	64.7%
Designer Shoes	Salvatore Ferragamo Gucci	35.2% 24.1%	59.3%
Apparel	DKNY Prada Calvin Klein	24.5% 20.8% 11.3%	56.6%
Sunglasses	Gucci Chanel	40.0% 14.3%	54.3%
Jewelry	Agatha Cartier Tiffany	19.4% 17.7% 16.1%	53.2%

Table 2 Study 1: Intention to Buy Counterfeits and Genuine Items By Experiences of Counterfeits

Experiences of Counterfeits	n	Intention to Buy Counterfeits	Intention to Buy Genuine Items	t-value
Hypothesized Sign		-	-	-
		Have You Ever Purcl	hasad Countarfaits?	
Handbags		nave Tou Ever Fulci	nased Counterrents :	
No	168	2.33 ^a (1.62) ^b	3.83 (2.02)	H1a: t = -7.47****
Yes	191	3.98 (1.84)	4.67 (1.81)	H2a: t = -3.63****
165	191	H5a: t = -8.96****	H6a: t = -4.15****	П2а. (– -3.03
Designer shoes		пра. (– -6.90	поа. (– -4.15	
No	202	3 FF (1 63)	4.07 (2.05)	H1b: t = -10.75****
	302	2.55 (1.62)		
Yes	60	4.52 (1.72)	4.95 (1.70)	H2b: $t = -1.57^*$
Annoral		H5b: $t = -8.50^{*****}$	H6b: t = -3.55****	
Apparel	074	0.54 (4.04)	4.50 (4.00)	114 1 40 50****
No	271	2.51 (1.64)	4.56 (1.92)	H1c: t = -13.50*****
Yes	88	4.15 (1.68)	4.47 (1.90)	H2c: $t = -1.28*$
		H5c: t = -8.11****	H6c: $t = 0.41$	
Sunglasses	000	0.47 (1.70)	4.40.40.44	11414 48 88 88 88 88 88 88 88 88 88 88 88 88
No	333	2.47 (1.72)	4.48 (2.11)	H1d: t = -13.63*****
Yes	29	3.41 (2.01)	4.72 (2.20)	H2d: $t = -2.50***$
		H5d: $t = -2.79***$	H6d: $t = -0.59$	
Jewelry				
No	233	2.42 (1.62)	4.49 (2.02)	H1e: t = -12.15*****
Yes	126	4.39 (1.73)	5.01 (1.65)	H2e: t = -3.00***
		H5e: t = -10.69****	H6e: t = -2.60***	
		Have You Ever Ow	ned Counterfeits?	
Handbags				
No	163	2.45 (1.72)	3.82 (1.99)	H1a: t = -6.44****
Yes	195	3.82 (1.84)	4.66 (1.84)	H2a: t = -4.51****
		H5a: t = -7.24****	H6a: t = -4.15*****	
Designer shoes			-	
No	297	2.54 (1.62)	4.08 (2.04)	H1b: t = -10.86****
Yes	62	4.48 (1.70)	4.87 (1.76)	H2b: t = -1.44**
		H5b: t = -8.56****	H6b: t = -3.12****	
Apparel			· · · · · · · · · · · · · · · · · · ·	
No	270	2.52 (1.64)	4.51 (1.96)	H1c: t = -12.77****
Yes	87	4.10 (1.69)	4.62 (1.79)	H2c: t = -2.14**
. 50	0,	H5c: t = -7.77****	H6c: t = -0.47	
Sunglasses		1100. (= 1.11	1100. (= -0.71	
No	230	2.42 (1.68)	4.51 (2.11)	H1d: t = -14.12****
Yes	29	3.76 (2.16)	4.38 (2.26)	H2d: t = -1.20
163	23	H5d: t = -3.99****	H6d: t = 0.32	1120.11.20
Jewelry		1134. t = -3.88	110u. t = 0.32	
No	226	2.40 (1.64)	4.51 (2.06)	H1e: t = -12.11****
Yes	133	4.32 (1.73)	4.95 (1.60)	H2e: t = -3.11****
		H5e: t = -10.45****	H6e: t = -2.23**	

Note that the lower case letters of a, b, c, d, and e next to the hypotheses refer to handbags, designer shoes, apparel, sunglasses, and jewelry, respectively.

^{*}p < 0.10; **p < 0.05; ***p < 0.01; ****p < 0.001; and *****p < 0.0001. Note: a The mean score of a 7-point scale of purchase intention anchored in 1 = "very unlikely" and 7 = "very likely." b The standard deviation.

Table 3 Study 1: Intention to Buy Counterfeits and Genuine Items
By Experiences of Genuine Items

Experiences of Genuine Items	n	Intention to Buy Counterfeits	Intention to Buy Genuine Items	t-value
Hypothesized Sign		Not Significant	-	-
		Have You Ever Purch	ased Genuine Items?	
Handbags				
No	285	3.20 ^a (1.94) ^b	4.07 (1.95)	H3a: t = -5.75****
Yes	73	3.20 (1.81) H7a: t = -0.04	5.07 (1.75) H8a: t = -4.24*****	H4a: t = -5.61****
Designer shoes		117 d. t = 0.04	110a. t = 4.24	
No	311	2.88 (1.78)	4.02 (2.01)	H3b: $t = -8.59*****$
Yes	50	2.82 (1.80)	5.40 (1.58)	H4b: $t = -6.86^{****}$
		H7b: t = 0.21	H8b: t = -5.26*****	
Apparel				
No	187	2.97 (1.87)	3.85 (2.01)	H3c: t = -5.06****
Yes	169	2.82 (1.67)	5.29 (1.49)	H4c: t = -13.00****
		H7c: t = 0.81	H8c: $t = -7.74******$	
Sunglasses				
No	264	2.52 (1.76)	4.13 (2.15)	H3d: t = -10.01****
Yes	96	2.53 (1.76)	5.47 (1.70)	H4d: t = -10.56****
		H7d: t = -0.08	H8d: $t = -6.11*****$	
Jewelry				
No	224	3.21 (1.92)	4.02 (1.89)	H3e: t = -5.27****
Yes	136	2.96 (1.91)	5.69 (1.47)	H4e: t = -11.88****
		H7e: t = 1.24	H8e: t = -9.36*****	
		Have You Ever Owr	ned Genuine Items?	
Handbags				
No	258	3.17 (1.94)	4.09 (1.97)	H3a: t = -5.82****
Yes	96	3.24 (1.83)	4.90 (1.68)	H4a: t = -6.01****
		H7a: t = -0.33	H8a: $t = -3.80^{*****}$	
Designer shoes				
No	303	2.85 (1.79)	4.03 (1.99)	H3b: $t = -8.86*****$
Yes	50	2.84 (1.68)	5.52 (1.68)	H4b: $t = -7.43*****$
		H7b: $t = 0.04$	H8b: $t = -5.64^{*****}$	
Apparel				
No	176	2.91 (1.80)	3.85 (1.98)	H3c: t = -5.33*****
Yes	176	2.84 (1.69)	5.28 (1.51)	H4c: t = -13.06****
		H7c: $t = 0.39$	H8c: t = -7.66*****	
Sunglasses				
No	255	2.50 (1.74)	4.19 (2.16)	H3d: $t = -10.38*****$
Yes	99	2.51 (1.77)	5.38 (1.74)	H4d: t = -10.51****
		H7d: $t = -0.01$	H8d: t = -5.42****	
Jewelry				
No	205	3.16 (1.89)	3.99 (1.87)	H3e: t = -5.30****
Yes	148	2.97 (1.90)	5.66 (1.48)	H4e: t = -12.68****
		H7e: t = 0.92	H8e: t = -9.39*****	

^{*}p < 0.10; **p < 0.05; ***p < 0.01; ****p < 0.001; and *****p < 0.0001. Note: a The mean score of a 7-point scale of purchase intention anchored in 1 = "very unlikely" and 7 = "very likely." b The standard deviation.

Table 4
Study 1: Intention to Buy Genuine Items Rather Than Counterfeits
By Experiences of Counterfeits and Genuine Items

Preference Difference between Genuine Items and Counterfeits Counterfeit Experiences Genuine item Experiences Have You **Have You** Have You Have you **Product Purchased** Owned **Purchased** Owned **Experiences** Counterfeits? Counterfeits? Genuine Items? **Genuine Items?** Hypothesized Sign **Handbags** 1.50^a (2.60)^b 1.36 (2.70) 0.87 (2.56) 0.93 (2.56) No Yes 0.69 (2.63) 0.84 (2.59) 1.86 (2.84) 1.66 (2.70) H9a: t = 2.92*** H10a: t = -2.88*** H10a: t = -2.35*** H9a: t = 1.88** **Designer shoes** 1.51 (2.45) 1.55 (2.45) 1.14 (2.34) 1.18 (2.33) No Yes 0.43 (2.13) 0.39 (2.12) 2.58 (2.66) 2.68 (2.55) H10b: t = -4.17***** H9b: t = 3.49*****H9b: t = 3.80***** H10b: t = -3.97*******Apparel** 0.93 (2.32) No 2.05 (2.50) 2.00 (2.57) 0.88 (2.39) Yes 0.31 (2.33) 0.52 (2.26) 2.47 (2.47) 2.44 (2.48) H9c: t = 5.95 ******H9c: $t = 5.14^{*****}$ H10c: t = -6.17***** H10c: t = -5.90********Sunglasses** 1.69 (2.59) No 2.02 (2.70) 2.08 (2.68) 1.62 (2.63) Yes 1.31 (2.82) 0.62 (2.80) 2.94 (2.73) 2.88 (2.73) H10d: t = -3.84***** H9d: t = 1.34*H9d: t = 2.81*** H10d: t = -4.17**** Jewelry No 2.08 (2.60) 2.11 (2.61) 0.81 (2.30) 0.82 (2.23) Yes 0.62 (2.32) 0.63 (2.35) 2.76 (2.69) 2.71 (2.59) <u>H9</u>e: t = 5.44***** H9e: t = 5.47***** H10e: t = -7.29***** H10e: t = -7.30*****

^{*}p < 0.10; **p < 0.05; ***p < 0.01; ****p < 0.001; and *****p < 0.0001.

Note: ^a The mean score of a 7-point scale of purchase intention anchored in 1 = "very unlikely" and 7 = "very likely."

^b The standard deviation.

Table 5 Study 2: The Experimental Design

		Prada Handbag		Louis	Vuitton
Questionnaire	n (= 420)	Price of a Genuine Prada	Price of a Counterfeit Prada	Price of a Genuine Louis Vuitton	Price of a Counterfeit Louis Vuitton
Version 1	50	\$1,000 ^a	No counterfeit presented	\$500	\$50 (10%)
Version 2	56	\$1,000	\$200 (20%) ^b	\$500	\$25 (5%)
Version 3	59	\$1,000	\$100 (10%)	\$500	No counterfeit presented
Version 4	44	\$1,000	\$50 (5%)	\$500	\$100 (20%)
Version 5	56	\$500	No counterfeit presented	\$1,000	\$100 (10%)
Version 6	51	\$500	\$100 (20%)	\$1,000	\$50 (5%)
Version 7	55	\$500	\$50 (10%)	\$1,000	No counterfeit presented
Version 8	49	\$500	\$25 (5%)	\$1,000	200 (20%)

Note: a is in the US dollars translated at the 1 to 1,000 exchange rate from won, the South Korean currency. b is the proportion to the price of the genuine item.

Table 6
Study 2: Intention to Buy Counterfeits and Genuine Handbags
By Experiences of Counterfeit Handbags

Cond	rimental ditions	Purchase		Dependent Variables		_
	Price of a Counterfeit Handbag	Experience of Counterfeit Handbags	n	Intention to Buy a Counterfeit Handbag	Intention to Buy a Genuine Handbag	t-value
		Hypothesiz	ed Sig	n -	-	-
Pooled	Pooled	No Yes	258 54	Prada 1.85 ^a (1.47) ^b 2.82 (1.84) H15a: t = -4.54****	2.24 (1.43) 2.39 (1.57) H16a: t = -0.81	H11a: t = -4.07**** H12a: t = 1.08
\$500	\$25 (5%)	No Yes	42 6	1.93 (1.43) 2.83 (1.51) H15b: t = -1.45*	2.53 (1.57) 2.67 (1.86) H16b: t = -0.19	H11b: t = -1.89** H12b: t = 0.14
\$500	\$50 (10%)	No Yes	44 11	1.97 (1.26) 2.23 (1.44) H15c: t = -0.60	2.53 (1.43) 2.09 (1.36) H16c: t = 0.96	H11c: t = -1.90** H12c: t = 0.26
\$500	\$100 (20%)	No Yes	32 18	1.78 (1.34) 3.56 (2.28) H15d: t = -3.48****	2.41 (1.60) 2.83 (1.65) H16d: t = -0.89	H11d: t = -1.58* H12d: t = 1.00
\$1,000	\$50 (5%)	No Yes	35 9	2.26 (1.70) 3.33 (1.58) H15e: t = -1.79**	2.60 (1.65) 3.00 (1.73) H16e: t = -0.62	H11e: t = -0.85 H12e: t = 0.44
\$1,000	\$100 (10%)	No Yes	55 4	1.69 (1.24) 2.25 (1.50) H15f: t = -0.86	2.17 (1.29) 1.00 (0.00) H16f: t = 1.78	H11f: t = -2.00** H12f: t = 1.67
\$1,000	\$200 (20%)	No Yes	50 6	1.59 (1.13) 1.33 (0.52) H15g: t = 0.97	1.97 (1.36) 2.08 (1.09) H16g: t = -0.24	H11g: t = -1.79** H12g: t = -1.46*
Pooled	Pooled	No Yes	235 60	Louis Vuitton 1.70 (1.18) 2.67 (1.77) H15h: t = -5.07****	2.94 (1.86) 2.42 (1.62) H16h: t = 2.43	H11h: t = -9.02***** H12h: t = 0.61
\$500	\$25 (5%)	No Yes	50 6	1.60 (0.93) 2.17 (1.47) H15i: t = -1.33*	3.74 (1.99) 2.17 (1.33) H16i: t = 1.88	H11i: t = -7.04**** H12i: t = -0.00
\$500	\$50 (10%)	No Yes	38 7	1.51 (0.79) 3.79 (1.70) H15j: t = -3.46****	3.26 (1.96) 2.36 (1.38) H16j: t = 1.17	H11j: t = -4.96**** H12j: t = 1.53
\$500	\$100 (20%)	No Yes	35 9	2.11 (1.47) 2.56 (1.45) H15k: t = -0.81	4.24 (1.73) 4.39 (1.64) H16k: t = -0.23	H11k: t = -6.26**** H12k: t = -2.21**
\$1,000	\$50 (5%)	No Yes	32 17	1.94 (1.51) 3.50 (2.06) H15l: t = -3.03***	2.17 (1.49) 2.68 (1.73) H16l: t = -1.07	H11I: t = -0.60 H12I: t = 1.11
\$1,000	\$100 (10%)	No Yes	39 15	1.35 (0.80) 2.00 (1.46) H15m: t = -2.11**	1.79 (1.40) 1.73 (1.18) H16m: t = 0.15	H11m: t = -1.81** H12m: t = 0.85
\$1,000	\$200 (20%)	No Yes	41 6	1.78 (1.40) 1.33 (0.61) H15n: t = 0.77	2.43 (1.63) 1.42 (0.80) H16n: t = 1.48	H11n: t = -1.98** H12n: t = 0.18

*p < 0.10; **p < 0.05; ***p < 0.01; ****p < 0.001; and *****p < 0.0001; Note: ^a The mean score of a 7-point scale of two purchase intention items anchored in 1 = "very unlikely" and 7 = "very likely" and 1 = "not at all" and 7 = "a lot."; ^b The standard deviation.; Note that the hypotheses of Study 2 are labeled by adding ten to Study 1. For example, Hypothesis 11 and 20 of Study 2 is equivalent to Hypothesis 1 and 10 of Study 1, respectively.

Table 7 Study 2: Intention to Buy Counterfeits and Genuine Handbags By Experiences of Genuine Handbags

Cond	rimental ditions	Purchase		Dependent Variables		_
	Price of a Counterfeit Handbag	Experience of Genuine Handbags	n	Intention to Buy a Counterfeit Handbag	Intention to Buy a Genuine Handbag	t-value
		Hypothesiz	ed Sigr	Not Significant	-	-
Pooled	Pooled	No Yes	211 101	Prada 2.07 ^a (1.52) ^b 1.90 (1.64) H17a: t = 0.96	2.00 (1.29) 2.82 (1.81) H18a: t = -5.63*****	H13a: t = -0.30 H14a: t = -4.79****
\$500	\$25 (5%)	No Yes	36 12	2.14 (1.52) 1.75 (1.22) H17b: t = 0.80	2.18 (1.43) 3.71 (1.54) H18b: t = -3.17***	H13b: t = -0.19 H14b: t = -3.31****
\$500	\$50 (10%)	No Yes	38 17	2.04 (1.35) 1.97 (1.18) H17c: t = 0.19	2.07 (1.27) 3.29 (1.39) H18c: t = -3.22***	H13c: t = -0.08 H14c: t = -3.17***
\$500	\$100 (20%)	No Yes	29 21	2.38 (1.88) 2.48 (2.02) H17d: t = -0.17	2.10 (1.47) 3.19 (1.63) H18d: t = -2.46***	H13d: t = 0.60 H14d: t = -1.18
\$1,000	\$50 (5%)	No Yes	21 23	2.90 (1.89) 2.01 (1.47) H17e: t = 1.61*	2.67 (1.71) 2.70 (1.64) H18e: t = -0.06	H13e: t = 0.45 H14e: t = -1.29
\$1,000	\$100 (10%)	No Yes	45 14	1.92 (1.38) 1.11 (0.29) H17f: t = 3.71****	1.97 (1.22) 2.46 (1.46) H18f: t = -1.27	H13f: t = -0.17 H14f: t = -3.54****
\$1,000	\$200 (20%)	No Yes	42 14	1.56 (1.12) 1.57 (1.00) H17g: t = -0.04	1.94 (1.12) 2.11 (1.02) H18g: t = -0.52	H13g: t = -1.72** H14g: t = -1.24
Pooled	Pooled	No Yes	192 103	Louis Vuitton 1.89 (1.33) 1.91 (1.46) H17h: t = -0.16	2.44 (1.69) 3.67 (1.81) H18h: t = -6.78*****	H13h: t = -3.80***** H14h: t = -7.17****
\$500	\$25 (5%)	No Yes	42 14	1.77 (1.09) 1.32 (0.50) H17i: t = 2.09**	3.26 (1.92) 4.50 (1.91) H18i: t = -2.10**	H13i: t = -4.75**** H14i: t = -5.82****
\$500	\$50 (10%)	No Yes	30 15	1.78 (1.18) 2.03 (1.47) H17j: t = -0.62	2.58 (1.73) 4.20 (1.80) H18j: t = -2.91***	H13j: t = -2.06** H14j: t = -2.85***
\$500	\$100 (20%)	No Yes	21 23	2.31 (1.31) 2.11 (1.60) H17k: t = 0.46	4.00 (1.72) 4.52 (1.66) H18k: t = -1.02	H13k: t = -4.02**** H14k: t = -5.23****
\$1,000	\$50 (5%)	No Yes	29 20	2.34 (1.85) 2.68 (1.90) H17I: t = -0.61	1.88 (1.42) 3.03 (1.58) H18l: t = -2.65***	H13I: t = 1.08 H14I: t = -0.55
\$1,000	\$100 (10%)	No Yes	34 20	1.57 (1.10) 1.45 (0.99) H17m: t = 0.41	1.37 (0.74) 2.48 (1.78) H18m: t = -2.66***	H13m: t = 1.14 H14m: t = -2.54***
\$1,000	\$200 (20%)	No Yes	36 11	1.78 (1.35) 1.55 (1.29) H17n: t = 0.50	1.93 (1.40) 3.42 (1.64) H18n: t = -3.05***	H13n: t = -0.53 H14n: t = -3.26****

^{*}p < 0.10; **p < 0.05; ***p < 0.01; ****p < 0.001; and *****p < 0.0001.

Note: ^a The mean score of a 7-point scale of two purchase intention items anchored in 1 = "very unlikely" and 7 = "very likely" and 1 = "not at all" and 7 = "a lot."

^b The standard deviation.

Table 8 Study 2: Intention to Buy Genuine Handbags Rather Than Counterfeits By Experiences of Counterfeit and Genuine Handbags

	erimental nditions		Purchase Intention Difference between a Genuine item and a Counterfeit		
Price of a Genuine Handbag	Price of a Counterfeit Handbag	Purchase Experience	Purchase Experience of a Counterfeit Handbag	Purchase Experience of a Genuine Handbag	
		Hypothesized Sign	+	-	
Pooled	Pooled	No Yes	Prada 0.50 ^a (1.97) ^b -0.35 (2.38) H19a: t = 2.78***	0.04 (1.98) 1.01 (2.11) H20a: t = -3.94****	
\$500	\$25 (5%)	No Yes	0.64 (2.20) -0.17 (2.84) H19b: t = 0.81	0.07 (2.18) 1.96 (2.05) H20b: t = -2.64***	
\$500	\$50 (10%)	No Yes	0.57 (1.99) -0.14 (1.76) H19c: t = 1.07	0.03 (1.93) 1.32 (1.72) H20c: t = -2.48***	
\$500	\$100 (20%)	No Yes	0.63 (2.24) -0.72 (3.06) H19d: t = 1.78**	-0.28 (2.46) 0.71 (2.78) H20d: t = -1.33*	
\$1,000	\$50 (5%)	No Yes	0.34 (2.39) -0.33 (2.29) H19e: t = 0.76	-0.24 (2.43) 0.61 (2.27) H20e: t = -1.20	
\$1,000	\$100 (10%)	No Yes	0.47 (1.75) -1.25 (1.50) H19f: t = 2.19**	0.04 (1.78) 1.36 (1.43) H20f: t = -2.82***	
\$1,000	\$200 (20%)	No Yes	0.38 (1.50) 0.75 (1.26) H19g: t = -0.58	0.38 (1.44) 0.54 (1.61) H20g: t = -0.34	
Pooled	Pooled	No Yes	Louis Vuitton 1.27 (2.16) -0.18 (2.33) H19h: t = 4.58*****	0.56 (2.03) 1.75 (2.49) H20h: t = -4.44***	
\$500	\$25 (5%)	No Yes	2.14 (2.15) 0.00 (0.63) H19i: t = 5.36*****	1.49 (2.03) 3.18 (2.04) H20i: t = -2.70***	
\$500	\$50 (10%)	No Yes	1.75 (2.17) -1.43 (2.47) H19j: t = 3.48****	0.80 (2.13) 2.17 (2.94) H20j: t = -1.78**	
\$500	\$100 (20%)	No Yes	2.13 (2.01) 1.83 (2.49) H19k: t = 0.37	1.69 (1.93) 2.41 (2.21) H20k: t = -1.16	
\$1,000	\$50 (5%)	No Yes	0.23 (2.21) -1.82 (3.07) H19l: t = 1.39*	-0.47 (2.33) 0.35 (2.85) H20I: t = -1.10	
\$1,000	\$100 (10%)	No Yes	0.45 (1.55) -0.27 (1.21) H19m: t = 1.79**	-0.21 (1.05) 1.03 (1.80) H20m: t = -3.18***	
\$1,000	\$200 (20%)	No Yes	0.61 (1.97) 0.08 (1.11) H19n: t = 0.64	0.15 (1.73) 1.82 (1.85) H20n: t = -2.75***	

 $^*p < 0.10$; $^{**}p < 0.05$; $^{***}p < 0.01$; $^{***}p < 0.001$; and $^{****}p < 0.0001$. Note: a The mean score of a 7-point scale of two purchase intention items anchored in 1 = "very unlikely" and 7 = "very likely" and 1 = "not at all" and 7 = "a lot." b The standard deviation.

Table 9 Study 2: Net Revenue Gains in Presence of Counterfeits **By Types of Consumers**

Turn of Community	_	Net Gains: Purchase Intention Difference between a Genuine	Revenues: Purchase Intention of a Genuine	Losses: Purchase Intention of a Counterfeit
Type of Consumers	n	item and a Counterfeit	Handbag	Handbag
		Prada		
All types of consumers (Pooled)	312	$0.35^a (2.07)^{b_{***}}$	2.36 (1.45)	2.01 (2.18)
Consumers except those who buy neither counterfeits nor genuine handbags	128	0.57 (2.27)***	2.71 (1.53)	2.13 (1.60)
Consumers who buy:				
 Counterfeit handbags only 	27	-1.04 (2.17)**	1.96 (1.29)	3.00 (1.95)
 More counterfeits than genuine handbags 	5	-1.40 (3.58)	2.40 (2.90)	3.80 (2.28)
 Counterfeits and genuine handbags equally 	8	1.88 (2.47)*	4.06 (2.15)	2.19 (1.41)
 More genuine handbags than counterfeits 	14	0.07 (1.37)	2.57 (1.30)	2.50 (1.65)
 Genuine handbags only 	74	1.25 (1.95)*****	2.88 (1.48)	1.63 (1.17)
Neither counterfeits nor genuine handbags	184	0.20 (1.91)	2.12 (1.35)	1.93 (1.40)
		Louis Vuitton		
All types of consumers (Pooled)	295	0.97 (2.27)****	2.87 (1.88)	1.89 (1.37)
Consumers except those who buy neither counterfeits nor genuine handbags	135	1.23 (2.58)****	3.32 (1.91)	2.09 (1.55)
Consumers who buy:				
Counterfeit handbags only	32	-0.42 (2.23)	2.22 (1.62)	2.64 (1.73)
 More counterfeits than genuine handbags 	6	-1.00 (3.30)	2.67 (1.89)	3.67 (2.36)
 Counterfeits and genuine handbags equally 	10	0.70 (2.06)	2.70 (1.77)	2.00 (1.41)
More genuine handbags than counterfeits	12	0.13 (2.32)	2.92 (1.62)	2.79 (1.78)
Genuine handbags only	75	2.37 (2.20)*****	3.99 (1.84)	1.62 (1.18)
Neither counterfeits nor genuine handbags	160	0.75 (1.94)****	2.49 (1.76)	1.73 (1.19)

*p < 0.10; **p < 0.05; ***p < 0.01; ****p < 0.001; and *****p < 0.0001. Note: a The mean score of a 7-point scale of two purchase intention items anchored in 1 = "very unlikely" and 7 = "very likely" and 1 = "not at all" and 7 = "a lot." b The standard deviation.

Table 10 **Study 2: ANOVA Results**

			Dependent Variab	les
Factors	d.f.	Net Gains: Revenues - Losses	Revenues: Purchase Intention of a Genuine Handbag	Losses: Purchase Intention of a Counterfeit Handbag
SPEND	1	5.42 ^a **	5.20**	0.76
TYPE	1	38.66****	22.57****	17.31****
BRAND	1	5.85**	9.81***	0.09
PRICEg	1	3.63*	15.88****	2.01
PRICEC	2	1.04	2.14	1.77
TYPE x BRAND	1	0.46	1.74	0.12
TYPE x PRICEg	1	2.28	1.63	0.66
TYPE x PRICEc	2	1.78	0.67	1.36
BRAND x PRICEg	1	7.49***	6.26**	1.77
BRAND x PRICEc	2	1.63	0.67	1.55
PRICEg x PRICEc	2	0.82	1.60	6.88***
TYPE x BRAND x PRICEg	1	0.06	0.80	0.26
TYPE x BRAND x PRICEc	2	0.07	0.61	0.34
TYPE x PRICEg x PRICEc	2	0.12	2.63*	2.05
BRAND x PRICEg x PRICEc	2	1.65	0.22	2.12
TYPE x BRAND x PRICEg x PRICEc	2	2.44*	0.95	1.68
F-value (d.f. = 24, 220)		5.20****	4.72****	3.14****
\mathbb{R}^2		0.36	0.34	0.25

F-value.

SPEND (Ratio-scaled): Monthly disposable income

TYPE (Two values): Consumers of genuine versus counterfeit handbags.

BRAND (Two values): Prada versus Louis Vuitton.

PRICEg (Two values): Price of the genuine handbag (\$1000 versus \$500).

PRICEc (Three values): Price of the counterfeit handbag (5%, 10%, versus 20% of the price of the genuine handbag).