



DOES COUNTERFEIT PRODUCT QUALITY LEAD TO INVOLVEMENT AND PURCHASE INTENTIONS? THE MODERATING EFFECTS OF BRAND IMAGE AND SOCIAL INTERACTION

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ABSTRACT

This study sets out to examine the effect of counterfeit product quality on consumer product involvement and purchase intention of counterfeits. Additionally, the authors investigate the moderating role of brand image and social interaction and assess their influence on counterfeit quality purchase intentions. A self-administered questionnaire was designed, and data were collected via mall intercepts among consumers who have exposure to counterfeit products. Hierarchical regression model was used to test the proposed hypotheses. The results from regression analysis revealed that the quality of counterfeits not only impacts purchase intentions but also proceeds as a determinant of consumer involvement with imitative products. The results also show that brand image of genuine products negatively moderates the counterfeit product quality–involvement relationship. Social interaction positively moderates the relationship between counterfeit quality and purchase intentions, nonetheless has a negative moderating effect on the link between product involvement and purchase intentions. Implications for research and practice are discussed.

Keywords: Brand image; Consumer behavior; Counterfeiting; Product involvement; Social interaction

INTRODUCTION

Nowadays, we can hardly differentiate between a genuine and an imitated product as counterfeits have flooded markets around the world with comparable levels of quality (Gentry et al., 2006). Counterfeiting is defined as illegally copying and selling authentic goods with a brand name (Grossman and Shapiro, 1988). According to Bian and Veloutsou (2005), counterfeiting has had its growth since early 1970s and is showing no sign of abating due to widespread consumer acceptance, irrespective of the wrongdoings and impairments associated with counterfeits. This is evident from the anti-counterfeiting group survey that revealed one-third of consumers would deliberately purchase counterfeit products if sold at a reasonable price and with adequate quality, and 29% of consumers have no objections with counterfeits provided that it does not put consumers at risk (Bian and Veloutsou, 2005).

Counterfeit products account for a large chunk of the world trade, exceeding 8% and valued at 1.77 trillion US dollars annually (International Anti-Counterfeiting Coalition, 2015). In just two years, from 2009 to 2011, product counterfeiting has grown over 10,000 percent driven by excessive demands for such products (Norum and Cuno, 2011). Consequently, counterfeiting is responsible for US\$200 billion a year in loss of jobs, unpaid taxes, and fallen sales of genuine brands (see Furnham and Valgeirsson, 2007). Multinational brands, notably, are suffering from these illegitimate businesses as they spend large amounts in R&D and marketing (Thurasamy et al., 2002). Indeed, there is growing concern over ‘hospitable’ social responses as sensitivity to counterfeit activities may not necessarily deter consumers from



buying imitated products (Norum and Cuno, 2011).

The Asian market is a distressing threat to multinational companies of well-known brands as the culture of piracy is prevalent (Lai and Zaickowsky, 1999). Malaysia, in particular, has been regarded as one of the “world’s worst violator of intellectual property” and named as “home for piracy” alongside China, Thailand, and India, due to the magnitude of counterfeit offenders (Haque et al., 2009). Moreover, it has been reported by Havocscope Global Market Indexes (2011) that the Malaysian counterfeit market has reached RM464 million, which is indeed alarming. This suggests that the implementation of existing laws and regulations are not adequate to curb counterfeit product activities in the country (Stumpf et al., 2011). According to Ali Salman, the Director of Research from Institute for Democracy and Economic Affairs, “Malaysia needs more coordinated efforts between the private and public sectors to effectively tackle illicit trade (included both contraband-authentic products being sold illegally and counterfeit-illegal copies of fake’s products). The government has been losing a substantial amount of tax revenue – close to an estimated RM8 billion a year – due to illicit trade, mainly involving tobacco, food and beverages, machinery and motor vehicle parts.” (Bernama, 2018). In view of mounting concerns regarding counterfeit business and activities, the International Trademark Association has highlighted the need for more research on the illicit activity of counterfeit goods in Malaysia to aid policymakers and enforcement on the issue.

Because counterfeits cause social and economic problems, illegitimate societal behaviors and product fabrications have become a prominent issue for many countries around the world with the US taking a lead role to deter the production of counterfeits (Haque et al., 2009). The Congress in US passed the Trademark Counterfeiting Act (TCA) in 1984 (Amendolara, 2004) while developing countries like Malaysia adhere to the Trade Description Act 1972 (Haque et al., 2009). Nonetheless, with the advancement of technology, authentic brands can be imitated with remarkable quality-standards and the manufactured items are pushed beyond recognition, if not hardly distinguishable from original brands (Cottman, 1992), hence offsetting legislative efforts to some extent. Examples of popular counterfeits with exceptional quality include; a pure leather counterfeited Prada or designer handbag, a high-end imitated Rolex watch, and a heavy-duty replicated mobile phone frame or screen protector.

Researchers in the past were mostly interested in identifying the underlying reasons that motivate consumers to buy counterfeit products despite unlawful behaviors (Lan, 2012). While some researchers contend that depleting ethical values in the society (e.g., negligence, selfishness) is the primary cause (e.g., Muncy and Vitell, 1992), others argue that financial advantage is the main reason for purchasing counterfeits (e.g., Dodge et al., 1996). From a behavioral standpoint, the basic instinct for purchasing counterfeits is to convey conspicuous associations with authentic brands (Han et al., 2010; Kim and Karpova, 2009). Academic scholars in Malaysia have also investigated this issue from the consumers’ perspective. A recent study by Perumal and Sapihan (2017) revealed that while behavior control had no direct impact on purchase intentions, consumer attitude and subjective norm positively influenced such intentions. Other key predictors of counterfeit purchase in Malaysia include lower levels of perceived risk and integrity, need for social recognition (Teo and Mohd Yusuf, 2017), poor ethical values, materialistic behavior (Ong et al., 2013), novelty seeking (Harun et al., 2012), social influence, personality, pricing, and economic considerations (Haque et al., 2011). In



summary, there are four primary factors that determine consumers' attitude towards counterfeits, namely product quality, economic status, moral values, and legal environment (see Cordell et al., 1996; Gupta et al., 2004). These elements, however, vary from person to person depending on the individual's sensitivity, needs, affordability, convenience, and accessibility (Hoon et al., 2001). Interestingly, a study by Lai and Zaickowsky (1999) revealed that counterfeit consumers 1) think that they are getting value for money as compared to buying original brands, 2) perceive that they are getting equal quality from counterfeits, and 3) believe that they are being ripped off by genuine producers.

Scholars are of the view that the demand for product duplications is the main reason for the overgrowth of counterfeits (e.g., Bian and Veloutsou, 2007; Gentry et al., 2001). This calls for an urgent need to understand and probe into consumer behavior towards counterfeit products (Stöttinger and Penz, 2003; Wee et al., 1995a). While past researchers have focused on the supply side of counterfeits, the demand side remains largely unexplored (Norum and Cuno, 2011; Penz and Stöttinger, 2005). Moreover, to the best of knowledge, empirical studies have ignored how the quality of counterfeit products influences consumers' purchase intentions. This topic warrants immediate attention as prior studies indicate that consumers perceive the quality of counterfeits to be as good as legitimate products (Tom et al., 1998). Wilcox et al. (2009, pg. 248) assert that 'the quality of counterfeit products has been steadily improving over the past several years...' and in another instance, Bian and Veloustou (2005, pg.211) claim that, 'Some counterfeit products are so good that even the brand owners are not able to distinguish them from genuine products without the help of laboratory tests...' Consequently, many consumers identify counterfeit products as an alternative to buying original brands (Bian and Moutinho, 2011).

The primary objective of this study is to assess how the quality of counterfeits influences consumer purchase intentions and product involvement. Additionally, the study investigates whether brand image and social interactions moderate the domain relationships. Theory of planned behavior (Ajzen, 1991) was adopted to develop our hypotheses. The theory states that an individual's behavior is subjected to attitude towards a certain conduct, norm, and behavioral control (Ajzen, 1991). This theory was established to address the limitations in theory of reasoned action, specifically with the integration of perceived behavior control (Notani, 1998) which denotes conviction of how easy or difficult a certain behavior will be embraced (Ajzen and Madden, 1986). In the case of buying a counterfeit product, consumers have to deal with a critical choice and the risks attached with the consumption of counterfeits, contrary to strong temptation in prices relative to genuine brands. Other supporting theories in this study include typology of goods, elaboration likelihood model, and associative network theory.

The present study aims to enhance our understanding of the phenomenon of counterfeit product and the underlying behavioral intentions among consumers. This paper makes a theoretical contribution to the literature on the theory of planned behavior and reasoned action by empirically testing the interdependencies between counterfeit product quality and related behavioral variables. This study is among the first to use a survey method that incorporates both direct and contingency perspectives in a single model. Furthermore, it contributes to the body of knowledge by validating a novel and comprehensive model that includes psychological as well as social motivation aspects of counterfeit consumption. The study also



gives suggestions to practitioners and policymakers on how counterfeit business activities can be further restrained.

CONCEPTUAL BACKGROUND AND HYPOTHESES

Direct Effects of Counterfeit Product Quality

Counterfeit product quality refers to significant imitative product improvements that can be attributed along various parameters such as attractive images, technical functions, and designs (Cordell et al., 1996). With the development of technology, the quality of counterfeits can now be improved to exceptional standards (Gentry et al., 2002). This has resulted in a great deal of branded counterfeits sold in the market that are identical to the original (Cottman, 1992; Gentry et al., 2002). The typology of goods (Nelson, 1970) suggests that consumers' inclination towards a counterfeit increases if they experience or can evaluate the quality of the product, which tends to suggest that improved quality of counterfeits may urge customers to buy or continue buying the product. Cordell et al. (1996) asserts that a consumer who perceives the quality of the counterfeit to be similar will tend to choose the counterfeit over its genuine counterpart. This is particularly apparent among brand conscious consumers with an average income as they are more likely to be enticed by quality counterfeits with low prices (Wee et al., 1995b). Similarly, Bloch et al. (1993) suggests that people would prefer to buy counterfeits over original branded products if the quality is good. Therefore:

H1: Counterfeit product quality has a positive influence on counterfeit purchase intention.

Consumers always seek quality products against the money they pay. Apparently, with improvements in counterfeit quality (Gentry et al., 2006), imitated products are getting more harder to be distinguished either from the original brand or between imitated products. Moreover, counterfeit product quality exists on a continuum from high quality to lower quality versions of the original (Yoo and Lee, 2005) and this instinctively urges consumers to be more involved with counterfeits i.e., to search and evaluate available options. As such, with varying levels of quality, consumer search process is becoming more intricate and can cause confusion (d'Astous and Gargouri, 2001). Research shows that when consumer concern is high, buying decision processes proceed through an extended series of stages, from information search and product evaluation to purchase decisions (Browne and Kaldenberg, 1997). Interested consumers may end up trying to search for the best counterfeit item within their reach (e.g., going from store to store, comparing quality and prices) and enthusiastically assess counterfeits against authentic brands. In this situation, the consumer needs time to gather information before making a final decision. This implies that counterfeit product quality leads to greater involvement with counterfeits. Therefore:

H2: Counterfeit product quality has a positive influence on consumer involvement with counterfeits.

Direct Effects of Product Involvement

Product involvement is defined as a person's enduring importance or relevance of a product, subject to his or her interest and need (Wulf et al., 2001). Product involvement has been a central element in determining consumer behavior (Dholakia, 1998) as involvement levels

determine the intricacy and depth of cognitive behavior in the decision process (Chakravarti and Janiszewski, 2003). Elaboration likelihood model (ELM) suggests that there is a high correlation between product involvement, attitude, and purchase intention when involvement level is high (Petty et al., 1981). The availability of product alternatives in the consumers' decision choice ultimately drives customer involvement with counterfeit products, and consumers will spend some time to analyze product features, quality, and price before making a purchase decision (Celsi and Olson, 1988). Although consumers know that the product is counterfeited, they are drawn by its quality and comparatively lower prices and are likely to purchase the product due to the effort and time taken to assess products. In fact, when consumers get involved in information search, quality evaluation, and alternative considerations, consumer purchase intention will likely increase (Chen, 2000). In the same vein, consumer involvement with counterfeits may lead to purchase intention. Based on this discussion, we propose that:

H3: Consumer involvement with counterfeits has a positive influence on counterfeit purchase intention.

The Moderating Effects of Brand Image

Brand image is defined as how a brand is perceived by customers (Aaker, 1996). In the context of this study, brand image refers to genuine brands. A well-communicated brand image helps to establish a brand's position and market performance, hence plays an integral role in building brand equity (Park et al., 1991). Brand image is important for consumers because it assists in their decision process to suit their needs and personality (Freling and Forbes, 2005) and influences buying decisions (Johnson and Puto, 1987). Based on associative network theory (Aaker, 1996), consumers generally buy branded products to communicate their desired self-image and express self-esteem (Escalas, 2004) and identify their self with specific brand (Ashraf and Merunka, 2013). Correspondingly, the underlying intention behind buying counterfeit products for most consumers is to own the prestige and image associated with branded products without the need to pay excessive prices (Cordell et al., 1996). With improvements in counterfeit quality, many consumers are tempted to search for alternative branded counterfeits and in fact desire to own one due to relative price differences (Bloch et al., 1993). As the brand image of original products becomes more prominent, counterfeit consumers will tend to get more involved with imitated products; searching and assessing the quality of counterfeits to better reflect self-image and conspicuous consumption. Therefore:

H4: Brand image will positively moderate (enhance) the counterfeit product quality effect on consumer involvement with counterfeits.

The bottom line for branded counterfeit production and sales is to duplicate the image of luxury brands (see Bian and Moutinho, 2011). Status conscious consumers with an average income level typically find branded counterfeits appealing (Wee et al., 1995b). Because buying a counterfeit product denotes acquiring authentic products and paying less (Tom et al., 1998), counterfeit consumers are willing to compromise the quality owning the image attached with the brand (Haque et al., 2009). However, the consumer is at risk of social rejection if others can judge the quality of the product or recognize it as an imitation (Penz and Stöttinger, 2005).

Consequently, consumers may favor a counterfeit with improved quality. Moreover, because of high prices of original brands, many consumers are inclined to buy counterfeit products to depict prestige and status symbol (Chadha, 2007). The greater the image of the original brand, the greater is the tendency that consumers will become conscious of the quality of counterfeits prior to making a purchase commitment, so as to avoid being ashamed by peers. Therefore:

H5: Brand image will positively moderate (enhance) the counterfeit product quality effect on counterfeit purchase intention.

The Moderating Effects of Social Interaction

Social interaction refers to individuals who live in a close-linked society and their lifestyles are prone to be influenced by friends and family. Based on Fishbein and Ajzen's (1975) attitude model, these individuals are more likely to be influenced by society and how their behavior is being perceived. Social power molds the buying behavior of consumers and has the capacity to control one's decision by way of perception and opinion of others (Magee and Galinsky, 2008). This notion is vital for understanding consumer behavior and should be investigated in consumer research (Rucker and Galinsky, 2009). Consumers normally buy luxurious brands to communicate their status (i.e., social conformity) to fellow counterparts and to the general public (Wilcox et al., 2009; Zhang et al., 2011). However, for many consumers, it would be very difficult to buy authentic brands due to exceptionally high prices. Alternatively, to gain social acceptance, they have no choice but to go for pirated products. Although socially active consumers would be susceptible to rejection if found using counterfeits (Miyazaki et al., 2009), a study by Sinha and Mandel (2008) corroborates that these social perceptions are eroding and will not work for individuals who have high tolerance for taking risks. Given the present setting, if a socially inclined consumer encounters a counterfeit with outstanding quality, this may lead to purchase intentions. Therefore:

H6: Social interaction will positively moderate (enhance) the counterfeit product quality effect on counterfeit purchase intention.

When product involvement is high, buyer decision process resides on a series of progressive stages and involves extensive product evaluation prior to making a purchase (Browne and Kaldenberg, 1997). As mentioned earlier, greater involvement entails greater search for product information (Chung and Zhao, 2003) and a large deal of information is derived from reference groups. These individuals tend to scrutinize information and evaluate the pros and cons of a product based on the information gathered (Fazio, 1990). Socially active consumers normally look for personal benefits and symbolic gains rather than maximizing product functionality (Solomon and Surprenant, 1985) and depict their status through genuine products (Wilcox et al., 2009). Moreover, when consumers acquaint themselves with branded products, they are more likely to regard counterfeits as inferior products that will never give actual pleasure, excitement, and desired status (Penz and Stöttinger, 2005). This behavior is mostly attributed to status conscious consumers who fear social rejection, particularly if they are found using counterfeits (Penz and Stöttinger, 2005). Above all, counterfeiting is illegal and consciously unfavorable by the media and general public (Walthers and Buff, 2008). Therefore, it is reasonable to assume a person who is more susceptible to social influence will

express negative attitudes towards counterfeits (Matos et al., 2007). Therefore, we hypothesize that:

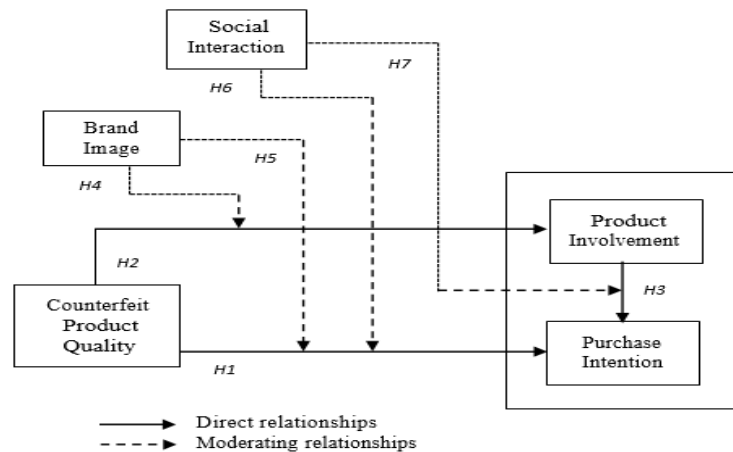
H7: Social interaction will negatively moderate (attenuate) the product involvement effect on counterfeit purchase intention.

Figure 1 summarizes the hypothesized relationships between the variables in this study. In addition to the hypothesized variables, we include several control variables (marital status, age, education, income) that may have a bearing on consumers' product involvement and counterfeit purchase intention. Including control variables in a research framework is highly encouraged to minimize confounding effects between variable relationships (Karatepe and Ngeche, 2012; Bukit and Iskandar, 2009). The conceptual model was regressed using OLS as specified in the following equation:

$$\begin{aligned}
 Y_{PIV} &= \alpha_0 + \alpha_1 CV_1 + \alpha_2 CV_2 + \alpha_3 CV_3 + \alpha_4 CV_4 + \alpha_5 X + \alpha_6 Z_1 + \alpha_7 Z_1 X + \epsilon_1 & (1) \\
 Y_{PIN} &= \beta_0 + \beta_1 CV_1 + \beta_2 CV_2 + \beta_3 CV_3 + \beta_4 CV_4 + \beta_5 X + \beta_6 Z_1 + \beta_7 Z_2 + \beta_8 Z + \beta_9 Z_1 X & (2) \\
 &\quad + \beta_{10} Z_2 X + \beta_{11} Z_2 Z + \epsilon_2 & (2)
 \end{aligned}$$

where

- YPIV = Product involvement, YPIN = Purchase intention,
- $\alpha \beta(0)$ = Intercepts of the regression equations,
- $\alpha \beta(1 \text{ to } 11)$ = Regression coefficients for YPIV and YPIN respectively,
- CV(1 to 4) = Control variables (Marital status, Age, Education, and Income respectively)
- X = Counterfeit quality,
- Z₁ = Brand image,
- Z₂ = Social interaction,
- Z = Product involvement, and $\epsilon(1 \text{ and } 2)$ = error terms.



Direct relationships Moderating relationships

Figure 1 Conceptual Framework

METHODOLOGY

Sample and Procedure

We chose Malaysia as our empirical setting for this study. Counterfeiting in this country is a major concern because of rampant counterfeit-related activities and consumer consumption (Haque et al., 2009). The data for the study were collected through mall intercept method from

6 randomly selected major shopping malls in Selangor state and the Federal Territory, which includes the capital of Malaysia, Kuala Lumpur, and other large cities in Malaysia. This study focused on Klang Valley because most studies pertaining to consumer behavior in Malaysia have chosen Klang Valley as the sampling area (Omar et al., 2017; Omar et al., 2015). A trained fieldworker approached every 8th shopper on their way in the malls. To minimize response bias, only shoppers aged 20 years old and above were permitted to participate. Participants were informed of the research objective and that responses would be kept strictly confidential. They were asked to identify a counterfeit branded product (e.g., football jerseys, jeans, bags, watches, shoes) before answering the questionnaire. Only those who were knowledgeable or have exposure to branded counterfeit products were chosen for this study. To ensure reliability, data was collected through different times of the day, different days of the week, and during weekends and weekdays (Aczel and Sounderpandian, 2009). Collecting data in this way assures the quality of the study and the results are more generalizable (Aczel and Sounderpandian, 2009; Malhotra, 2010).

The decision for appropriate sample size depends on the purpose of research and the nature of population under study (Cohen et al., 2007). The general rule of thumb is to have subject to item ratio of 5:1 (Ferguson and Cox, 1993; Hinkin et al., 1997). The present study has 31 items in total, so a sample size of 155 would be deemed acceptable. Similarly, Hair et al., (2010) suggested that minimum of a 100 sample size is required for a model containing five or fewer variables; similar to our case with five hypothesized variables. For this study, approximately 320 shoppers agreed to participate in the survey and questionnaires were left to be filled at their own convenience during their visit at the malls. The participants were asked to return the questionnaire at a given checkpoint before leaving the malls. Among all the respondents who agreed to participate, 214 were returned and finally 201 samples were retained for the analysis (62.8% affective response rate) after filtering the questionnaire for missing responses.

Measures

As depicted in the Appendix, the measures were based on pre-established items anchored on a seven-point Likert scale (1 = strongly disagree, 7 = strongly agree). Content validity was assessed by several academics and practitioners in the relevant field. They were asked to determine whether the items represented the constructs, including clarity and question structure (Judd et al., 1991). We measured quality of counterfeit products using eight items adapted from Baron et al. (1997) and Mukherjee and Hoyer (2001). Internal consistency of the items was assessed and deemed reliable ($>.70$, see Hair et al., 2006), with a Cronbach's alpha value of .73. The measure for product involvement was adapted from Zaichkowsky (1994) and the Cronbach's alpha value for the six items was

.71. For brand image, we adapted the items from Yoo and Donthu (2001) and the alpha value for the seven items was .74. For social interaction, the items were adapted from Bearden et al. (1989). The Cronbach's alpha for the five items was .70. Finally, purchase intention was measured using five items adapted from Erdem et al. (2006), with an alpha score of .71. As highlighted earlier, we incorporate consumer demographics as controls in our study. The highest correlation value among variables is .63 (see Table 2) which is lower than the threshold

of .80 proposed by (Bagozzi et al., 1991), suggesting that common method bias is not a threat to our data. To test the hypothesized relationships, hierarchical regression model was used (Cheng and Ho, 2014; Tussyadiah, 2016). The regression analyses were run using IBM SPSS Statistics 23 software. Structural equation modeling was not applied because the constructs used in this study do not have complex relationship.

Sample Profile

Table 1 presents the background or demographic characteristics of our sample. The sample was made up of 53% male and 47% female, among whom 44 percent were single and 56 percent of the respondents were married. The sample comprised varying age groups, from 20 years old and above. The respondents have at least a tertiary education or university degree. The sample comprised respondents from diverse income levels.

Table 1 Sample Profile

Demographics	Frequency (n = 201)	Percent (%)
Gender		
Male	107	53
Female	94	47
Marital Status		
Single	89	44
Married	112	56
Age (years)		
20 – 29	70	35
30 – 39	81	40
40 – 49	43	22
50 – 59	4	2
60 and above	3	1
Highest Education Level		
Secondary School Certificate	61	30
Diploma / Technical School	85	42
Bachelor’s Degree	46	23
Master’s Degree or Higher	9	5
Monthly Gross Income		
RM 600 – RM 1200	38	19
RM 1201 – RM 2400	75	37
RM 2401 – RM 3600	49	24
RM 3601 – RM 4800	28	14
RM 4801 – RM 6000	9	5
Over RM 6000	2	1

RESULTS

Hierarchical Regression analysis was used to test the hypotheses. Table 2 shows the descriptive statistics and correlation matrix. The Pearson correlation matrix in Table 2 suggests no multicollinearity problem among the constructs as values remained well below the critical level of .90 (Hair et al., 2006). Table 3 presents the results of hierarchical regression models for the two dependent variables, namely product involvement and purchase intention.

Constructs	1	2	3	4	5	6	7	8	9
Mean	4	1	1	2	2	4	5.	4.	4

	.250	.560	.960	.020	.521	.290	.070	.340	.520
Standard Deviation	.82	.48	.88	.084	.14	.75	.70	.70	.73
1. Purchase Intention	.100								
2. Marital Status	-.069	.100							
3. Age	-.176**	.608**	.100						
4. Education	.070	.272**	.346**	.100					
5. Income	-.059	.349**	.509**	.731**	.100				
6. Counterfeit Quality	.559**	-.051	-.022	.114	.141*	.100			
7. Band Image	.074	-.017	.037	.247**	.227**	.219**	.100		
8. Social Interaction	.369**	-.096	.064	.221**	.221**	.540**	.153*	.100	
9. Product Involvement	.625**	-.061	-.006	.130*	.070	.400**	.361**	.582**	.100

Table 2 Descriptive Statistics and Pearson Correlation Matrix

Note: * $p < .05$ (one-tailed). ** $p < .01$ (one-tailed).

Table 3 Results of Regression Analysis with Interactions (Standardized Coefficients)

Predictor Variables	Product Involvement		Purchase Intention	
	β	t	β	t
<i>Control Variables</i>				
Marital Status	-.016	-.228	.112	1.746*
Age	-.450	-6.692**	-.184	-2.518**
Education	.130	1.640†	.157	2.123*
Income	-.145	-1.68	-.166	-2.04

		2 [†]			8*
<i>Main Effects</i>					
Counterfeit Quality	.337	5.196** *		.207	2.963***
Brand Image	-.109	- 1.82 1*		-.075	- 1.31 4 [†]
Social Interaction				-.004	- .06 3
Product Involvement				.430	5.904***
<i>Interaction Effects</i>					
Brand Image x Counterfeit Quality	-.160	- 2.86 7**		.003	.0 4 5
Social Interaction x Counterfeit Quality				.174	2.4 02 **
Social Interaction x Product Involvement				-.115	- 1.77 5*
R ²	.454			.546	
Adjusted R ²	.431			.516	
F value	19.8 6***			18.6 1** *	

Note: [†] p < .10. * p < .05. ** p < .01. *** p < .001.

In our first hypothesis, we assert that improvements in the quality of counterfeit products will induce consumer purchase intentions. As shown in Table 3, the result for the predicted relationship is positive and significant ($\beta = .207, p < .001$), hence H1 is supported. We then expect that the quality of counterfeits will positively affect product involvement. Results show that counterfeit product quality positively effects product involvement ($\beta = .337, p < .001$). Therefore, H2 receives support. Hypothesis three states that, involvement with counterfeit products leads to purchase intentions. The result is significant and shows a positive relationship ($\beta = .430, p < .001$) between product involvement and purchase intentions. Therefore, H3 is supported.

Hypothesis four explains the moderating effect of brand image on the relationship between quality of counterfeit and involvement. The result shows that brand image negatively moderates the relationship ($\beta = -.160, p < 0.01$), opposite in direction to our proposed hypothesis. Therefore, H4 is refuted. Hypothesis five asserts that brand image positively moderates the counterfeit product quality–purchase intention link. The result did not show a significant moderating effect, hence H5 is rejected. Hypothesis six and seven proposes the moderation effect of social interaction on the relationship between the quality of counterfeit and purchase intentions, and product involvement with purchase intentions, respectively. Results show that social interaction positively moderates the relationship between counterfeit quality and purchase intention ($\beta = .174, p < 0.01$), thus H6 receives support.

Social interaction negatively moderates the relationship between product involvement and purchase intention ($\beta = -.115, p < 0.05$). Therefore, H7 is supported.

DISCUSSION AND IMPLICATIONS

The finding from this study advances the literature as the scope has not been explored before.



It makes a theoretical contribution and extends theory of planned behavior and reasoned action. One of the main objectives of this study is to assess how the quality of counterfeits affects consumer purchase intentions. Our finding is consistent with the literature as scholars hinted that counterfeit improvements can have a major effect on consumer behavior because consumers can simply opt to buy counterfeits to satisfy their symbolic needs (e.g., Yoo and Lee, 2005). Results also show that with improvements in the quality of counterfeits, consumer involvement intensifies in that they tend to spend more time assessing counterfeits. This suggests that many consumers in our study include counterfeits in their consideration set. Our study also shows that involvement with counterfeit products has a strong impact on purchase intentions, consistent with Bian and Moutinho's (2009) study.

To advance deeper in our understanding of counterfeit behavior, we examined the moderation effects of exogenous factors as proposed by Norum and Cuno (2011). Because brand image is regarded as one of the main reasons for the counterfeiting of original brands (Cordell et al., 1996), we incorporated this variable in our model, assuming that strong brand image of the original brand will enhance the relationship between counterfeit quality and product involvement. The results, however, appear in the opposite direction indicating that brand image tends to negatively moderate the relationship. A possible reason for this relationship is that brands with a prominent image will normally occupy a large pool of devoted consumers. This suggests that as the image of the genuine product increases, consumers tend not to fall for quality counterfeits and perhaps avoid being engaged with counterfeits.

For a more comprehensive model structure, we also examined the possible moderating effect of social interaction on counterfeit behavior. The results illustrate that social interaction amplifies the relationship between counterfeit quality and consumer purchase intentions. With significant quality improvements, there is no substantial difference in product appearances and the quality is almost impeccable, thus social interactive consumers who wish to secure acceptance will take risks in purchasing counterfeits. This finding is rather consistent with Albers-Miller's (1999) study. Apart from that, social interaction attenuates the impact of product involvement on purchase intentions as consumers who are more involved will critically analyze the market and products before making a purchase decision. Socially active consumers are more inclined with public self-consciousness in that they are more cautious of taking risks and concerned about their impression among peers (Nia and Zaichkowsky, 2000) so they tend to avert counterfeits. Moreover, when consumers anticipate undesirable consequences for purchasing a counterfeit, their involvement will alert them of erroneous choices they have made in the past and to make appropriate choices in the future (Shih and Schau, 2011).

The study has several implications for practitioners. Marketing campaigns for genuine brands should continue to focus on developing brand-personality differences and address the distinctions between counterfeit goods and original versions. To draw the attention of individuals who fear social rejection, targeted marketing campaigns that encourage virtuous communal interactions are deemed necessary, especially to convey negative impressions of counterfeits, its users, producers, and endorsers (Bian and Moutinho, 2009). Manufacturers of branded products should also strive to infuse appropriate brand personality behaviors within the society and that individuals will never be fully satisfied with counterfeits, regardless of



how good they appear (Nia and Zaichkowsky, 2000). Concerning the quality of counterfeits, marketer of authentic brands should release their products only after establishing discernable differences, so buyers and spectators can distinguish the fake from the genuine. Apart from that, the government should support small manufacturers and SMEs and encourage them to focus on developing their own brands rather than imitating or mimicking other brands, as this would ultimately generate more profit legally and accrue the benefits of producing quality products in the long run.

Authentic brand manufacturers should also come up with realistically lower-priced versions and have frequent discounts so that consumers can afford to buy genuine brands. This will not only promote genuine product purchases but will discourage the production of counterfeits. Though the quality aspect of counterfeits is improving, managers must design products in such a way that is not possible for others to emulate. Marketer should ultimately imbued the idea of using one genuine product is nobler than using multiple fake products.

LIMITATIONS AND FUTURE RESEARCH DIRECTIONS

This study carries some limitations that future research may address. The present study investigated branded counterfeit products in general. There is need to further study specific versions of counterfeits (e.g., automobile spare parts, pharmaceutical products, electronics) as there is a wide range of counterfeited products available in the market (Gentry et al., 2001). Consumer preferences for these versions may vary based on technical performance and specific tendencies for buying imitations. Future research should also venture into countries where counterfeiting is seen to be less tolerable. Apart from that, a larger sample with different set of moderators (e.g., cultural orientation, personal factors such as perfectionism and materialism) may give interesting results. We also suggest researchers to use a longitudinal perspective on pre- and post-purchase behaviors as this will provide more robust results. While this study investigates the non-deceptive aspect of counterfeiting, exploration into deceptive counterfeiting (i.e., consumers unknowingly purchase counterfeits) should provide novel insights.

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