

The relationship between the willingness of buying counterfeit goods and consumer personality traits

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Abstract

In the situation that the economic globalization is keeping improving, counterfeit goods has become a worldwide problem. Counterfeiting is now widely regarded as a seriously social, economic, and political issue. The majority of researches on counterfeiting have tended to focus on issues of supply. This paper stood in the side of counterfeits of home-textile to explore the relationship between willingness to buy counterfeit goods and consumer personality traits. Through studying on the undergraduate on campus which would like to purchase counterfeit goods, we found that it is the values of materialism, consumer ethical beliefs, consumer vanity characteristics and attitudes towards counterfeiting that would have significant impact on the consumer's willingness to buy counterfeit goods.

Keywords: willingness to buy counterfeit goods, the values of Materialism, Consumer ethical beliefs, Vanity characteristics

1. Introduction

Counterfeit goods (sometimes colloquially referred to 'knock-offs') refer to every kinds of unauthorized product that infringes upon intellectual property rights (brand names, patents, trademarks, and copyrights).[1] Counterfeit goods do great harm on social economic including unemployment, tax revenue and price of quality goods. It has the

worst impact brought by counterfeit goods in China among the other countries in the world.

According to the estimated result of China's state council reform and development commission that China is full of fake goods added up to \$19 billion to \$24 billion in the early year of 2001 in the market, however, the data seriously underestimated the seriousness of the counterfeit goods. Some famous brand owners estimated that counterfeit goods had taken up almost 15%-20% market-share in China. Every year Microsoft loses nearly \$10 billion due to software piracy.[2]

Because we find it so difficulty to get accurate statistics that those figures can't be confirmed. The conduct of counterfeiting is generally regarded as a seriously social, economic, and political problem. For example, studies have shown that counterfeit goods lowers consumers' confidence in legitimate brands and company reputations, impacts upon consumers' perceptions of genuine articles, and poses potential threat to consumer health and safety. Moreover, the problem of counterfeiting now has been identified in almost every field of major production, from computer software to prescription drugs.

Given the widespread effects of counterfeit goods, it comes as bad news that there is little literature on the field of counterfeit goods, particularly short of those related to consumers' willingness to buy counterfeit goods. Although consuming of counterfeit goods is so common, the research of this aspect is extremely rare in China, especially from the angle of consumers' intention to

purchase counterfeit goods. There always are some consumers owning more preference to buy counterfeit goods in contrast with others. For example, some consumers bought the low-cost generic Rolex, a CD or even counterfeit medicines without hesitation,[3] but in the same time the other people never thought about the possibility of buying counterfeit goods. This phenomenon needs academia to be worth to explore.

Even if the government and enterprise control counterfeit sales through the various measures in short time, because of the existence of counterfeit market demanding, consumers will also look for counterfeit goods through all kinds of channels. In the conclusion, we need to research counterfeit market from the perspective of consumers.

In this study, we mainly explore the relationship between the willingness to buy counterfeit goods and consumers' personality traits.

At first, we examined whether attitudes towards counterfeiting would significantly predict consumers' intention to buy counterfeit goods or not.

There are many studies related to attitudes towards counterfeiting as well as the purchase intention, but the measuring of counterfeit attitude has used different scale and dimension. Most of the researches reveals that consumers' intention has the very strong predictive impact on the consumer's conduct of buying counterfeit goods. Albers-Miller, Nancy D. Kwong et al, Wang et al, Penz all of their studies show that it is consumers' attitude towards counterfeiting that is positively correlated to purchase intention.[4][5][6][7]

We used Attitudes towards Counterfeiting Scale which is developed by Furnham and Valgeirsson .8 The latter is a three-factor scale which included measuring attitudes towards law about counterfeiting, the value of counterfeit products, and previous experience of buying counterfeit goods. In their studies, Furnham and Valgeirsson demonstrated that each of these three factors can significantly predict the willingness to buy 15 types of counterfeit goods.[8] This research proposes the following hypothesis:

H1a Consumers' attitudes towards law and order in respect of counterfeiting have a negative relationship with intention to buy y counterfeit goods.

H1b The value of counterfeit products have a positive relationship with intention to buy counterfeit goods.

H1c Previous experience of buying counterfeit goods have a positive relationship with intention to buy counterfeit goods.

Secondly, we examined the association of an individual's materialism values (that is, in pursuit of material objects at the expense of mental or spiritual aspects of life) with intention to buy counterfeit goods. About the research of consumer materialism values, Furnham and Valgeirsson found that consumer materialism values have positive correlation with intention to buy counterfeit goods.8But the conclusion of Wee et al's research is that materialism values have no relationship with consumers purchase intention.[9]

In this study we used Richins Material Value Scale. The latter measures materialism along three-dimensions, namely acquisition centrality (describes the extent to which possessions are placed in the centre of one's life), acquisition as the pursuit of happiness (the idea that possessions are essential for life satisfaction and well-being), and possession-defined success (the extent to which people judge themselves and others by the number and quality of possessions accumulated))[10]. This research proposes the following hypothesis:

H2a acquisition centrality have a positive relationship with intention to buy counterfeit goods.

H2b acquisition as the pursuit of happiness have a positive relationship with intention to buy counterfeit goods.

H2c possession-defined success have a positive relationship with intention to buy counterfeit goods.

Thirdly, we examined the association of an individual's consumer ethics with intention to buy counterfeit goods. As to the research of this subject, Wang, Tan, Moore's research conclusion is that if consumers have the higher moral intentions, the lower that consumers will purchase counterfeit goods, [11] [12] Amit Poddar, Jeff Foreman, Syagnik Banerjee, Pam Scholder Ellen Further research found that once consumer acquired the awareness of the high social evaluation of the producer's responsibility, consumers will also reduce the counterfeit goods of this enterprise's brand .[13]

In this study we use Muncy and Vitell consumer ethics scale, their scale has four dimensions: (1) actively benefiting from illegal activities, (2) passively benefiting, (3) actively benefiting from deceptive (or questionable, but legal) practices, and (4) no harm/nofoul activities. [14] This research proposes the following hypothesis.

H3a: actively benefiting from illegal activities have a positive relationship with intention to buy counterfeit goods.

H3b: passively benefiting have a positive relationship with intention to buy counterfeit goods.

H3c: actively benefiting from deceptive practices have a positive relationship with intention to buy counterfeit goods.

H3d: no harm activities have a positive relationship with intention to buy counterfeit goods.

Fourthly, we will explore the association of consumer vanity characteristics with intention to buy counterfeit goods. Vanity trait is a feature of psychology which referred to the willing of having a certain honor that in fact they don't or cannot have, but showing particularly that as if having some kind of honor personality through words and deeds.

In the measurement of vanity characteristics, we used vanity characteristics scale of Netemeyer, Burton and Lichtenstein e. This scale contains two dimensions involving appearance care and achievement care. This research proposes the following hypothesis:

H4a: consumer appearance care have a positive relationship with intention to buy counterfeit goods

H4b: consumer achievement care have a positive relationship with intention to buy counterfeit goods

Regarding to intention to buy counterfeit goods, we adopted the undergraduates as the research objects. In the study, eight kinds of counterfeit goods, which is the main counterfeit goods college students often buy, are research objects. They respectively are shoes, clothes, watches, mobile phones, bags, handbags, wallet, backpack, electronic products, computer software.

2. Method

2.1. Exploratory factor analysis

The scale of the questionnaire used is mature scale, and even some scales haven't been used in domestic, so before the formal questionnaire survey is proceeding, we need to purify the factor.

First we use exploratory factor analysis and principal component analysis. Taking the characteristic values greater than 1 as the principle of selecting factor, and then using the biggest variation as a method for orthogonal axis. Keep the item which factor loading absolute value greater than 0.5. According to the purification of the results, in a formal scale, consumer attitude scale has seven-items, Materialism scale has ten-items, and vanity characteristics have nine-item items.

Muncy and Vitell consumer ethics scale, have four dimensions: (1) actively benefiting from illegal activities, (2) passively benefiting, (3) actively benefiting from deceptive (or questionable, but legal) practices and (4) no harm/no foul activities. But in using of the data we were able to have the exploratory factor analysis. It was found that Chinese consumers' ethic contains merely three types, passively benefiting and actively benefiting from deceptive can be combined into one factor that is benefiting behavior factor. (Table 1) This is consistent with Taiwan scholar Lu Long-quan's research which is about consumer ethic belief. [15] So in the next study, we merge H3b and H3c into one research hypothesis that the benefiting behavior has a positive relationship with intention to buy counterfeit goods.

As to intention to buy counterfeit goods, we extract two factors. Through the table we can see that we can extract the first factor from the first seven commodities, and extract the second factor from the computer software which as a unique goods. (Table 2) This means the first seven goods have uniform willingness to buy counterfeit goods but computer software purchasing intention don't. This may be due to the characteristics of counterfeit software, because price gap is too big between original software and piracy software in China. In the situation of the other factors remaining unchanged, the willing that is consumers to buy pirated software is too strong to make the pirated software purchasing intention be not representative. So in formal research process

we will kick the counterfeit software out the scope of study.

Rotated Component Matrix			
	Component		
	actively benefiting from illegal activities,	benefiting behavior	No harm/nofoul activities
Xiao Qiang return the goods damaged by him, but he tell businessman what he bought is defective goods, do you think he	.113	.759	.116
Xiao Qiang eat furtively in the super market ,but he don't pay money . do you think he	.181	.834	-.017
Xiao Qiang lies about commodity prices to clerk, do you think he	.342	.788	-.016
Xiao Qiang kept silent when he find clerk give more change in check-out, do you think he	.599	.577	-.043
Xiao Qiang keep silent when clerk miscalculate the age give preferential price to children, do you think he	.797	.244	-.043
Xiao Qiang find more money in his own account , but don't ask it's source. do you think he	.751	.201	.098
Xiao Qiang lies about her children age ,and obtain preferential price when buying tickets, do you think he	.739	.304	.123
Xiao Qiang use expired coupon for shopping, do you think he	.759	.161	.204
Xiao Qiang lie about price to bargain when buying the phone. do you think he	.632	.008	.441
Xiao Qiang don't buy clothes after trying on for an hour, do you think he	.296	.148	.507
Xiao Qiang return the commodity that he don't like. do you think he	.101	-.098	.832
Xiao Qiang only read in bookstore but never buy. do you think he	-.023	.044	.816

Table 1: Consumer ethical beliefs factor analysis results

	Component	
	1	2
electronic products	.540	.415
shoes	.821	.044
clothes	.825	.090
watch	.530	.458
Mobile phone	.655	.187
luggage	.737	.258
Handbags wallet backpack	.686	.163
software	-.014	.907

Table 2: Consumers purchase intention factor analysis results

2.2. scale

The formal research is the questionnaire which is based on the scale that is already purified through exploratory analysis. All the scale used Likert5 level measurement scales, 5 is for the totally agree, 1 is for disagree completely.

2.3. Participants

All participants were undergraduates from one university in Anhui province and 280 questionnaires were issued. After questionnaire were collected, the author carefully checked the questionnaire and deleted questionnaire which is not standard.. The effective questionnaire was a total of 228 copies. The effective rate was 81.43%. Among them, 122 are boys, 106 are girls.

2.4. reliability and validity

We use the Cronbach α value to test scale reliability. Except acquisition centrality and Previous experience of buying counterfeit goods, the Cronbach α value of other factors were greater than 0.7. This means that the reliability is better, the scale of the internal consistency is better.

We used application confirmatory factor analysis method to inspect the validity of the scale, and through calculation, the model of the variables confirmatory factor analysis fit well. (Table 3) Factor AVE value are greater than 0.5, the combination of various latent variables reliability are greater than 0.60, its convergence validity meets the requirement. AVE square root is more than the correlation coefficients among two factors, it shows the discriminant validity meets the requirement. (Table4)

		mean	Standard deviation	reliability	Combination reliability	AVE	Cumulative explained variance
consumer materialism values	possession-defined success	8.9254	2.25640	0.704	0.7529	0.505	51.437
	acquisition as the pursuit of happiness	11.4561	3.17102	0.759	0.799	0.501	
	acquisition centrality	7.9035	1.98439	0.687	0.7448	0.4934	
consumer ethics	actively benefiting from illegal activities	4.9474	1.99047	0.773	0.8366	0.6309	64.27
	benefiting behavior	14.0526	4.31030	0.857	0.8623	0.5133	

	no harm activities	9.0439	1.80010	0.713	0.7703	0.5384	
vanity characteristics	appearance care	11.6711	2.94017	0.763	0.8405	0.572	56.187
	achievement care	17.9956	3.49890	0.782	0.8425	0.5175	
attitudes towards counterfeiting	Consumers' attitudes towards law and order	9.7368	2,58103	0.779	0.8613	0.675	65.694
	The value of counterfeit products	5.7018	1.85334	0.705	0.8251	0.8027	
	Previous experience of buying counterfeit goods	5.8509	1.60524	0.677	0.6835	0.5193	
intention to buy counterfeit goods	intention to buy counterfeit goods	19.6754	5.61464	0.837	0.843	0.752	51.213

Table3: Factor reliability and validity check list

possession-defined success	.711	**										
acquisition as the pursuit of happiness	.424**	.708										
acquisition centrality	.581	.483	.702									
actively benefiting from illegal activities	.190	.254*	.234*	.794								
benefiting behavior	.401**	.318**	.199	.537**	.716							
no harm activities	.327**	.215	-.240	.492	.425**	.734						
appearance care	.445**	.432**	.206	.115	.323**	.358**	.756					
achievement care	.200	.286	-.258*	-.204	.149	.464**	.454**	.719				
Consumers' attitudes towards law and order	.191	.237*	-.187	-.047	.042	.115	.061	.211**	.821			
The value of counterfeit products	.415**	.488**	.100	.054	.235**	.079	.251**	.434**	.447	.896		
Previous experience of buying counterfeit goods	.154	.227**	-.065	.053	.216	.107	.249*	.234**	.363*	.474**	.720	
intention to buy counterfeit goods	.464**	.338**	.043	.060	.200**	.440**	.143*	.394**	.109	.437**	.078	.867

Table 4: Correlation coefficient matrix and average extracting the square root of the variance

In the study, we explored the factors which can affect the purchasing intention among the

3. Results

independent variables by the linear regression model. First, we look for independent variables that have influence on the willing to buy counterfeit goods by the hierarchical regression model. Through constantly adding new variables into hierarchical regression model, we can see only five independent variables

entered the linear model among the all 11 independent variables.(Table5) They respectively are the value of counterfeit products, achievement care, no harm activities, possession-defined success, acquisition as the pursuit of happiness.

Coefficients							
Model		Unstandardized Coefficients		Standardized Coefficients	Sig	R2	△R2
		B	Std. Error	Beta			
1	possession-defined success	.519	.167	.309	.000	0.143	0.143
	acquisition as the pursuit of happiness.	.300	.119	.197	.002		
2	possession-defined success	.380	.173	0.209	.001	0.245	0.102
	acquisition as the pursuit of happiness.	.275	.119	0.169	.002		
	no harm activities	.512	.210	0.342	.000		
3	possession-defined success	.408	.175	0.197	.001	0.328	0.083
	acquisition as the pursuit of happiness.	.290	.121	0.164	.018		
	no harm activities	.435	.216	.279	.000		
	achievement care	.452	.112	.297	.000		
4	possession-defined success	.298	.178	.164	.018	0.504	0.176
	acquisition as the pursuit of happiness.	.272	.123	.153	.021		
	no harm activities	.497	.212	.246	.001		
	achievement care	.370	.114	.257	.001		
	the value of counterfeit products	.738	.209	.407	.000		

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	the value of counterfeit products	.738	.209	.407	.000		

a. Dependent Variable: intention to buy counterfeit goods

Table 5: Hierarchical stepwise regression results

hypothesis questions	Yes or no
H1a: Consumers' attitudes towards law and order in respect of counterfeiting have a	no

negative relationship with intention to buy counterfeit goods.	
H1b: The value of counterfeit products have a positive relationship with intention to buy counterfeit goods.	yes
H1c: Previous experience of buying counterfeit goods have a positive relationship with intention to buy counterfeit goods.	no
H2a: acquisition centrality have a positive relationship with intention to buy counterfeit goods.	no
H2b: acquisition as the pursuit of happiness have a positive relationship with intention to buy counterfeit goods.	Yes
H2c: possession-defined success have a positive relationship with intention to buy counterfeit goods.	Yes
H3a: actively benefiting from illegal activities have a positive relationship with intention to buy counterfeit goods.	no
H3bc:benefiting behavior have a positive relationship with intention to buy counterfeit goods	no
H3d: no harm activities have a positive relationship with intention to buy counterfeit goods.	Yes
H4a: consumer appearance care have a positive relationship with intention to buy counterfeit goods	no
H4b: consumer achievement care have a positive relationship with intention to buy counterfeit goods	Yes

Table 6: Result

From the above data processing results, we can see five hypothesis questions have been proved

4. Discussion

Through the research we can find which personality traits are more likely to make the purchasing counterfeit decision. The results confirmed that the consumers' attitude towards counterfeit goods will affect the consumers' willingness to buy counterfeit goods and in the same time the result supports the predecessor's research results. But the results also have some different places, according to Viren Swami, Tomas Chamorro-Premuzic, Adrian Furnham's research in Britain,[16] they used the same counterfeit attitude scale. The research results not only showed the value of counterfeit products will influence the intention to buy counterfeit goods, but also consumers' attitudes towards law and order also positive correlated with consciousness. But our studies have not found the existence of this relationship. This may due to the Chinese understanding of counterfeit goods is not the

among the previous 11 hypothesis questions, the other six have been not. (Table6) same as Western. There has mature consciousness of market and intellectual property protection rights in Western, consumers will think the behaviors of purchasing counterfeit is a kind of illegal marketing activity, which can reduce the counterfeit willingness to buy. But in China, the consumer consciousness is weak, the relationship between consumer laws and regulations consciousness and willingness to buy counterfeit is not verified.

The results suggested correlated relationship between consumer materialism values and consumers purchase intention This is consistent with Adrian Furnham, Halldor Valgeirsson's research. But Adrian Furnham found two factors acquisition as the pursuit of happiness and acquisition centrality all can significantly affect the consumers' willingness to buy counterfeit. In our studies haven't confirmed the existence of the this relationship between acquisition centrality with the willingness to buy counterfeit.

The study found that there is existing relationships between the consumer vanity characteristics and intention to purchase counterfeit. Through qualitative research methods in-depth interviews, Hoe et al found that customers consume the fake well-known commodities instead of buying quality goods, still can bring self expression utility as quality goods consumption can. [17] But in Wen-Bin Chiou, Ying-Hsien Chao's research, consuming fake phone will reduce the self assessment. Why consumers vanity trait in achievement appearance can affect consumer willingness to buy counterfeit good, but appearance have no effect care. This question is worth to explore.

Home and abroad study have confirmed that consumer ethical beliefs have positive relationship with intention to buy counterfeit goods. Taiwan scholars Lu Zhi-zhong and Lu Yan-nit use the same consumer ethical scale which develops by Muncy&Vitell. The study showed that consumer ethical beliefs have significant influence on purchasing counterfeit product behaviors. The people whose evaluation about benefiting behavior is lower will never buy counterfeit goods. Our study didn't find this phenomenon. But our study find that consumer whose evaluation about no harm activities is higher, his possibility to buy counterfeit products is bigger. The reason may be that Chinese consumers do not think consumption of counterfeit goods can cause certain harm on social organization.

And because the main counterfeit objects in China is foreign well-known brand, consumers based on national center socialist may be holding the idea that consuming the counterfeit goods of foreign well-known brand which made by domestic enterprises is support power on domestic enterprise. For examining the accuracy of this, we need to have further research.

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