

Economics of Counterfeit Products: With Special Reference to Mobile Phones & Watches

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Abstract

The Indian population is increasing at an alarming rate causing threat to the economic development, not forgetting the fact that another sector that is increasing at the same rate is the counterfeit goods. One important fact that needs to be checked is why we find such an increase in the counterfeit products. The fact that the aspiration of the population is increasing, in desire to have luxury products needs to be explored. Objective of the study is to examine the attitude toward the counterfeit product in the market on various parameters. A total 1207 responses from 22 districts of Delhi & NCR were used to examine the probability of intention to buy counterfeit of Mobile phones & Watches; the study employed the factor analysis and logit analysis. Results revealed that counterfeit purchasers had lower perceptions of business ethics, implying that ethical beliefs may become the key to develop the strategies to reduce demand for counterfeit products.

Keywords

Counterfeit Products, Economics of Counterfeit, Logit Analysis, Business Ethics

1. Introduction

Counterfeiting is ages old story; Phillips, T. [1] described counterfeit of wine production in 27 BC. As per the data shared by Avery, P. [2] around US\$ 200 billion of traded products internationally are counterfeit. The number quoted does not take into account the counterfeiting in the local markets. Products that look same in trademark, packaging and labeling are imitations which are counterfeit products [3]. Counterfeit as per Oxford dictionary means exact imitation of something valuable with the intention to deceive or defraud. The Indian population is increasing at an alarming rate [4] causing a lot of threat to the eco-

conomic development, not forgetting the fact that another sector that is increasing at the same rate is the counterfeit goods in the Indian market. One important fact that needs to be checked is why we find such an increase in the counterfeit products [5]. The hidden fact that needs to be explored, is the aspiration of the population increasing, in the desire of having luxury products which are very expensive or beyond reach. This gives rise to another fact that we have counterfeit only in the luxury market. Actually this statement is not true in today's time; one needs to just mention the brand and you will find (n) number of counterfeit in that category. The entire imitation is more than 80 percent in the luxury product as per Mr. D S Rawat Secretary General of Assocham comes from China. The countries that have been contributing to the counterfeit in the international market are Turkey, Singapore, Thailand, India and Morocco.

According to International chamber of commerce, 2015, the global and social impact of counterfeiting was US\$ 1.7 trillion. Over 6 million counterfeit cigarettes were seized by US Customs in Miami [6]. In last two decades there is 10,000 percent growth in the counterfeits (International Anti-counterfeiting coalition). As per FICCI CASCADE study, 2015 there was an estimated loss of 44.4 percent to 7 sectors in the manufacturing industry due to counterfeiting from 2012 to 2014. In India 20 percent cause of road accidents is auto parts used as counterfeit as per the automotive component manufacturer association of India [7]. 400 billion was lost by exchequers due to illegal trade as per ACO CASCADE report 2014. The 70 percent of counterfeit seized globally comes from China (IP crime group annual report 2013/14). Counterfeiting is no more a concern of any specific nation but has turned to be global issue; with the extensive spread across the globe it has become a concern of the global economy. Counterfeiting over the years has extended evidently to all the sectors sparing none [8]. The purchase of replicas at cheap price and inferior quality has grown ominously worldwide and is a great concern at the universal level [9]. The counterfeits in the capital of India, Delhi are 75 percent that are catered to the different market across the city [10]. The counterfeit products are items that look akin to the original products. These products are put in the category of lookalike and copycats. This is a widely followed practice where half of the supermarkets stores imitate the package in color, shape and size of the leading brands in the US [11].

As per the report by International Trademark Association (INTA) and the International Chamber of Commerce, due to growth in global economic value of counterfeits and piracy product there is an estimation of \$2.3 trillion by 2022. 100 copied products may or may not be substandard in quality but they are counterfeit [12]. In this market if we try and understand the operational motive [13], it is found that people who are part of this process to an extent gets carried away by the economic deliberations partially but not completely. In the report it is stated that the cheap prize of the product motivates the prospective or actual buyers to buy the counterfeit [14].

Counterfeiting is not a new concept for India. Nehru Place and Palika Bazaar in New Delhi, Richie Street and Burma Bazaar in Chennai, Manish Market, Heera

Panna, Lamington Road and Fort District in Mumbai, and Chandni Chowk in Kolkata as per the report by United States Trade Representative (USTR) are the markets that have to be monitored due to high trade in these area. In USTR's "Special 301" report, India is on the "priority watch list" regardless of intellectual property rights (IPR) irrespective of exhaustive submission in 2009 for Compliance measures initiated [15]. Lawfully counterfeiting implies to create something untrue, in the similarity of something which is true; it always denotes a duplicitous intent [16]. In counterfeiting the product is branded by using the existing brand name without the permission of the legal brand owners. The products that are made are poor in quality. The trademarks used in counterfeits are indistinguishable from the original brand, trade mark used is without the approval from the trade mark owner [17]. As per the past studies the two categories of counterfeit on the basis of awareness amongst consumers are deceptive and non-deceptive. The awareness of intellectual property violation in some consumer is low as a result they buy counterfeit product which is signified as a "deceptive counterfeit" purchase [18]. The copied products appear to be original product by this the consumers are cheated as they are innocently ready to accept the counterfeit product [19] [20] [21]. The manufacturer and the retailer of the counterfeit products make the consumer believe that they are buying genuine product which is actually sold illegally in the market. This is mostly experienced by the consumer in the medicines where they are made to purchase fake products by showing them as original product which is actually counterfeit. Hence the consumer should not be held responsible for this behavior as they are not consciously doing it. Whereas in case of "non-deceptive counterfeit" products the consumers are aware of the purchase that they are making is a counterfeit. In this case where the customer is aware of the purchase that they are making is illegal the manufacturer and the retailer cannot be blamed for misleading the consumer [22]. Luxury brand market most commonly experiences counterfeiting in this form [12], the difference between the genuine and counterfeit is notable by the consumer on the bases of price, quality and distribution channel of the product itself. The purchase of counterfeit where it is non-deceptive raises the argument as to why do consumers in the market place misconduct [23]. Objective of the study is to examine the attitude toward the counterfeit product in the market of mobile phones and watches. This study examined an ethically questionable behavior—counterfeit purchases—using four variables: attitude toward counterfeits, consumer ethics, perceptions of business ethics, and culture. Counterfeit purchasers had more positive attitudes toward counterfeits, lower scores on consumer ethics, and lower scores on perceptions of business ethics than no purchasers. The paper is elaborated into various sections. Section 2 comprehends the theoretical background whereas section 3 focuses on literature review. The Section 4 and 5 goes in detail of Data & Methodology and Findings. In Section 6 the results, their implications are presented. The research paper is concluded with the conclusion, limitations and future research directions.

2. Theoretical Background

The monopolist in the luxury goods market can enjoy the counterfeiting by raising the prices of the goods due to the fines forced on counterfeiters are nailed to the price of original product this is only possible under the condition of strict counterfeit monitoring rules Yao [24]. Consumer eager to differentiate themselves from crowd can charge higher price from the consumer due to introduction of counterfeit where consumer settles for fakes, with high premium Barnett [5]. The desire of higher class people to differentiate themselves from lower class is basically through unpleasant comparison which is discussed in the Theory of the leisure class, Veblen [25]. Arguing on the same Barnett *et al.* [26] stated that the perceived value of Gucci bags will not be hampered by the copied inferior products of Gucci. According the presence of counterfeit product increases the status premium as a privilege enjoyed by the genuine users of the product.

The reports prove that counterfeiting is a serious problem at the macroeconomic level that has been fought, as it has disruptive effects on national economies. Where as in the micro economics there is not much of academic work done so the possessions on privileges holders (e.g. on sales volume and prices) and on consumer safety risks and consumer utility are less clear [27]. As per the literature available counterfeit has been considered an unlawful activity, but at the same time the activity may also be considered valuable for right holders irrespective of the negative connotation in the market. De Castro *et al.* [28], with an economics point of view in relation to digital products stated that piracy can surge the profits of pirated firms. The benefits are identified by different authors as network effects [29], signaling effects [30], bandwagon effects [31], and herding effects [32]. Some authors in regard to counterfeiting argue that in case of luxury fashion products can create a flattery effect benefiting the genuine producer of the product. Raustiala and Sprigman [33] show that the fashion cycle is accelerated with the counterfeit generating demand for new original products. According to Grolleau and El Harbi [34] designers of high end counterfeit businesses can explore in new directions that are not discovered yet.

The theory of social control explains how an individual behaves as per the norms formed by the society in which they stay and comply. The theory further explains the attitude of the consumers towards the counterfeit products and the beliefs of people. Norms are rules or standards which are set within a particular society. Freeburg [35] stated that it is the way in which human being should or should not see, think, do or say under different situation. Punj [36] comprehends that the consumer misbehaves or disrupts accepted standards as per the situations. He also quoted in his research that there are 35 types of consumer misbehavior which also includes consumers who purchase goods knowing the fact that the goods purchased are counterfeit.

3. Literature Review

The literature covers the brands that have imitations which are known as coun-

terfeits. The explanation by different authors on counterfeit is covered. Bian and Moutinho [37] states that counterfeit are brands that cannot be differentiated from original brands as they bear the trademark and invades on to the rights of the original brand mark. According to Lai and Zaichkowsky [12] counterfeit are products that are exactly copied but with inferior quality which may not be true always. Copies are called as imitations, lookalike, me too or copycats products which are not identical but look quite similar to branded products. Balaban is and Craven [38] states that look a like are products that have similar packaging like the leading brands in the market. Whereas Lai and Zaichkowsky [12] called imitation as not identical product or service but viewed similar in context to name, shape, substance, meaning to a widely accepted product or service in the marketplace.

As per Van Horen & Pieters [39] [40] copycats are products that have copied the name, packaging, logo and design of the well-recognized brand and take the advantage of the marketing efforts as well as positive association in the marketplace. The literature review clearly states the difference between the counterfeit and the imitation concept. Counterfeit is exact copy and imitation looks similar from the review of literature. Lai and Zaichkowsky [12] explain the different types of fakes, on the basis of intention as counterfeiting and piracy. Piracy is another way for counterfeiting where the intentions of the seller are not always to cheat the buyer. The buyer is aware of the fact that is unauthorized and is a copy of the original product. It is a conscious behavior of the buyer for the fake products where they are well aware about the location, price, quality, features. According to report released by the US Trade Representatives in 2014 Nehru Place, Delhi, India is identified as the prominent place that deals in pirated software's, movies and music and counterfeit goods in large quantities. Another category defined by Lai and Zaichkowsky [12] is gray marketing, it is about overproduction done by the manufacture by ignoring the quantity demanded by the companies in the west and the surplus is sold illegally in the market. Hilton *et al.* [41] categorized the counterfeit fashion industry into four categories vanity fakes or low intrinsic, low perceived value product, overruns or copies made from remaining material, ignored copies made by other designers or fashion houses, samples made by the fashion houses themselves.

Punj [41] consumer purchase different types of products to boost their self-concept or to attain equality or to differentiate themselves and this would be as per their culture. Barnett *et al.* [26] one of the variable that affect the purchase of counterfeit is the status symbols associated with the brand as social status. The purchase of luxury fashion brands are exemplified by the social status which is an implicit factor. The desire of these counterfeit goods is due to the positive association with the brand, logo, market value and image. Self-consciousness is high in consumers that have collective culture than the consumers with individualistic cultures [42]. Buyers in individualistic culture prefer private brands whereas in the collectivist culture consumer prefers national or global brands. Counterfeits are made as viable alternative for consumers who cannot afford to purchase lux-

ury brands [43]. Counterfeit is considered as misbehavior in the United States as it violates the standards of situations for exchanges [36]. The fact is that counterfeit purchase is not considered as violation of norms in all cultures. The purchase of counterfeit products in some of the Asian countries is not considered to be morally, ethically or legally wrong Chaudhary *et al.* [44]. Copying something instead is considered as part of the traditional culture in which things don't belong to individual or business but to the people, it is also to get admiration and at times considered to enhance the status and the image of the imitated object Hung [45]. The study tries to measure the attitudes toward counterfeits in watches and mobile phone among students. Following hypotheses were investigated.

H₁: Counterfeits purchase has no relationship with consumer ethics.

H₂: Purchasers counterfeits will not differ in terms of their legal knowledge.

H₃: Individual preferences have no significant impact on Counterfeit purchases.

H₄: Pricing is indifferent variable for Purchasers of counterfeits.

H₅: Push effect has insignificant impact on Counterfeit purchases.

H₆: Counterfeit purchases happen with refuting harm to the country or businesses.

Counterfeiting studies previously done on consumer behavior were moreover based on country of origin Chakraborty *et al.* [46] or on the data observed by the industry [47]. According to Eisend & Guler [48] very few recent studies have applied existing theoretical framework in the demand side of counterfeit brands. On the basis of this literature review, we can say that individualist cultures and collective culture are found among consumers and they are different in their decision making for counterfeits purchase. Hence, we have considered this as literature gap and tried to bridge the gap through this study.

4. Data & Methodology

The research was conducted in Delhi & NCR (National Capital Region). The selection of the region was made on the basis of availability of branded goods. Counterfeit of branded goods are readily available to all consumers in the Delhi & NCR area. The convenience sampling method was used for data collection as the users of counterfeit product are unknown. Krejcie and Morgan, [49] suggested the use of convenience sampling in case of unknown population. We have considered Morgan's table for sample size and the population above 10,000. The table suggests sample size of 1193 at 99 percent confidence level and 3.5 percent margin of error.

A total 1250 respondents were interviewed for the topic of counterfeit. Out of 1250 respondents, 43 cases were excluded because of non-sampling error. Hence only 1207 responses were used for further study. The study was confined to 22 districts of Delhi & NCR. Such method of sampling is useful in any critical study [50].

A structured questionnaire with closed ended questions was used for gauging the response of the respondents. A 5-point Likert scale (arranged from 1 to 5) was used as a measurement method. To ensure the feasibility of the question-

naire, 20 respondents were interviewed and considered for pre-testing. Various statistical tools have been employed to meet the objectives of the study. Descriptive statistics and percentage has been used to articulate several findings and to reach to a clear conclusion. To test the mean difference between two groups, we can use the non-parametric approach [51] [52]. Most of the variables of the study are categorical in nature; hence, we have used parametric method of data analysis such as standard deviation and variance estimation [53].

Descriptive statistics in **Table 1** suggest the demographic attribute of total 1207 responses, 48.1 percent of respondents are female. The gender shows standard deviation of 0.5 and variance of 0.25. The age of respondents was divided into two different groups (*i.e.* below 30 and above 30). 65 percent of the respondents are from below 30, age group and mean of 1.35 was noticed in the collected data. Education is considered as one of the important factor for counterfeit purchase, it is assumed that a person with less education is purchasing more counterfeit products. Hence our data is showing that out of total respondents, 74.3 percent of the respondents are post graduated or above. The income level shows that majority of the respondents from the income group are below 2.5 lakhs per annum.

To examine the probability of having intention to buy counterfeit products, the study employed the logit analysis. Maximum likelihood estimators have been employed by logit analysis [54]; Pindyck and Rubinfeld [55]. In the analysis, dependent variable is dichotomous in nature. Independent variables are attitude, ethics, legality, individual preferences, pricing, push effect, refuting harm, Individual age, Income, gender and education.

The functional form of the Logit model is as follows:

$$\left(i.e., \ln \left(\frac{p}{1-p} \right) = a + bX \right)$$

Table 1. Descriptive statistics.

Variable	Descriptions	Frequency	Percentage	Mean	St. Deviation	Variance
Gender	Female	581	48.1	0.52	0.5	0.25
	Male	626	51.9			
Age	Below 30	784	65	1.35	0.477	0.228
	Above 30	423	35			
Education	Below Undergraduate	310	25.7	1.96	0.684	0.468
	Postgraduate	640	53.0			
	Above postgraduate	257	21.3			
Income	Below 250,000	402	33.3	2.16	0.994	0.989
	250,000 to 500,000	322	26.7			
	500,000 to 1,000,000	370	30.7			
	Above 1,000,000	113	9.4			

David Cox has developed the Logistic regression in 1958. Binary logistic model is to estimate the probability of a response, binary in nature. To estimate the coefficients of the model, Due to its non-linear relationship OLS procedure cannot be applied. Maximum likelihood method has used to estimate the parameters in equation [54]. In literature, studies of Singhapakdi *et al.* [56] and Muncy and Vitell [57], suggested to apply factor analysis in the study with respect to counterfeit products. They had applied factor analysis to reveal factors affecting consumer attitudes toward counterfeits purchase. Application of principal factor analysis gives a total of seven components is used in the study, we have selected it with cumulative Rotation Sums of Squared Loadings of 70.3 percent. Hence on the basis of literature review we can summarize that these seven components are attitude towards counterfeit items, consumer ethics, legality, Individual preference, pricing, push effect and refuting harm to economy. **Table 2** signifies that there are total of 7 components received from the principal component analysis. The detailed analysis is presented in **Appendix 1** and **Appendix 2**.

5. Results and Discussions

A constructive synthesis along with the findings of the study has been presented in this section. The study employed the stepwise selection technique by Forward Selection (Wald) method. The entry testing based on the significance of the score statistic, and removal testing based on the probability of the Wald statistic is used to construct a variety of regression models from the same set of variables.

Table 3 shows the significant variables of the logistic regression analysis applied on the counterfeit of watches (the complete output is presented through forward step Wald methods). The “Hosmer and Lemeshow” test (**Table 3**) indicates that the model was fitted well. The level of significance of “goodness of fit” of the model is very high at degrees of freedom is 8. The chi-square value is 22.355. Although the non-parametric variant of R-square is low, according to a prevailing literature [54]; Pindyck and Rubinfeld [55] the determination of correlation diagnostic is not a vital measure for non-parametric models. Hence we can summarize that prices of the watch and individual preferences, impacts the intention to buy counterfeit watches in Indian market. Higher the price less the intention to buy counterfeit watches will be there and vice-versa.

Table 4 shows the significant variables of the logistic regression analysis applied on the counterfeit of mobile phones (the complete output is presented through forward step Wald methods). The “Hosmer and Lemeshow” test (**Table 4**) indicates that the model was fitted well. The level of significance of “goodness of fit” of the model is very high, at degrees of freedom 8. The chi-square value is 43.810. Although the non-parametric variant of R-square is low, according to a prevailing literature [54]; Pindyck and Rubinfeld [55] the determination of correlation diagnostic is not a vital measure for non-parametric models.

Hence we can summarize that income level and individual preferences, impacts the intention to buy counterfeit watches in Indian market. However, the education of an individual and push effect and refuting harm to economy has

Table 2. Factor analysis & rotated component matrix.

Variables	Statements	Items
Attitude	Buying counterfeit products demonstrates that I am a wise shopper	Buy CF wise
	Counterfeit products are just as good as designer products	Easy afford
	I would buy counterfeit products even if I could easily afford to buy non-counterfeit products	As good as design
	I like counterfeit goods because they look more like original products	Lookalike
	I buy counterfeit products because the prices of designer products are unfair and overpriced	Designer over priced
	Counterfeit products do not hurt the companies that manufacture the original product	Nohurtmanufac
Ethics	Business ethics and social responsibility are not very important to the survival of a business enterprise	Ethic for survival
	Being ethically and socially responsible is the most important thing a firm can do	Ethical social firm
	The overall effectiveness of a business can be determined to a great extent by the degree to which it is ethically and socially responsible	Effective trughethic
	The most important concern for a firm is making a profit, even if it means bending or breaking the rules	Breaking rule
Legality	Good ethics is often good business	Ethic is business
	People who sell counterfeit products are committing a crime	Sell CF is crime
	Social responsibility is equal to profitability	Social equal profit
	People who buy counterfeit products are committing a crime	Buy CF is crime
	People who manufacture counterfeit products are committing a crime	Manufac CF is crime
Indiprefrence	I will not say anything when the waitress miscalculates the bill in my favour	Waitress m is calculate
	I will return damaged merchandise when the damage is your own fault	Return damage own fault
	I would return an item after finding out that the same item is now on sale	Retursaleitem
Pricing	I will not give misleading price information to my friend for an un-priced item	Mislead price
	I will not Change price-tags on merchandise in a retail store	Pricetagschange
Push effect	I never purposefully buy counterfeit products but shopkeeper gives me	Shop keeper give
	I buy counterfeit products without realizing that I am buying a fake products	Widout realizing
Refuting harm	Counterfeit products do not hurt our country's economy	Hurt economy
	If survival of a business enterprise is at stake, then employees must forget about ethics and social responsibility	Forget ethics

Table 3. Logistic regression for Counterfeit in Watches-Forwards Step Wald.

Variables	B	S.E.	Wald	Sig.	Exp(B)
Indiprefrence	-0.277	0.097	8.106	0.004*	0.758
Pricing	-0.245	0.076	10.337	0.001*	0.783
Constant	3.335	0.364	83.725	0.000*	28.079

Chi-square through Hosmer and Lemeshow test: 22.355 (df: 8) (*p*-Value: 0.004)

-2 Log likelihood: 818.890

Cox & Snell R Square: 0.012

Nagelkerke R Square: 0.024

Dependent Variable entered: Counterfeit in Watches

Table 4. Logistic regression for Counterfeit in Mobile phones-Forwards Step Wald.

Variables	B	S.E.	Wald	Sig.	Exp(B)
Indiprefrence	0.356	0.132	7.230	0.007*	1.427
Push effect	-0.252	0.103	5.988	0.014*	0.777
Refutingharm	-0.243	0.111	4.828	0.028*	0.784
Income	0.375	0.125	8.948	0.003*	1.454
Education	-0.406	0.179	5.165	0.023*	0.666
Constant	3.118	0.627	24.690	0.000*	22.593

Chi-square through Hosmer and Lemeshow test: 43.810 (df: 8) (*p*-Value: 0.000)

-2 Log likelihood: 623.475

Cox & Snell R Square: 0.022

Nagelkerke R Square: 0.053

Dependent Variable entered: Counterfeit in Mobile phones

negative cause and effect relation in the logistic equation. This signifies that the higher the consumer's educational attainment, the less likely they will buy the counterfeit mobile phones and vice-versa.

6. Managerial Implications

The study tries to analyze the pattern of counterfeits in Mobile phones and watches. This study was inspired from the news published in Indian newspapers, "Counterfeit of high-end phones including iPhones and watches like Tissot and Omega brands worth Rs 15 crore have been seized by the Indian Customs". The study has shown the factors influencing the willingness of the respondents to buy the counterfeit mobile phones and watches. The demographic attributes of the consumers such as education level, age and annual income affect their buying intention of counterfeits. Consumers having younger age, or holding a higher level of education or lower annual income as well as high identifying abilities are likely to have a higher awareness of buying counterfeit products. Hence, the group of consumers can be classified as under non-deceptive consumers group.

Various other factors may also affect prominently consumers' intention towards purchase of counterfeits.

The findings suggest that legal awareness is not available to meet the relevant problems arising due to counterfeit in India. The logit analysis showed that most of the demographic attributes are not significantly related to the probability of intention to purchase counterfeit or otherwise. Among all demographic attributes, education and income are more effective to consumers' intention to purchase counterfeits. Recommendations based on the findings of the study and previous discussion:

a) Indian Government needs to enhance the information on “consumer rights, welfare and protection regulations”; especially focusing on the suburbia and undeveloped or town region. In addition, Government service is required to facilitate the consumers for application of rules and regulations in counterfeit.

b) Indian Government could take initiative to enhance the motivational activities regarding social rules and ethics. Especially in Indian education systems, ethical training is required to be incorporated.

c) Indian legal system and pricing policies should be matched with the requirements necessity of the consumers to avoid the manufacturers who skirt the rules. Indian government needs to set up a stringent law aims to counterfeit buyers in order to reduce their deceptive buying activities by forcing them to follow the strict rules.

d) The selling and purchase of the counterfeit should be considered as a crime by the government accordingly the regulation should be set.

e) There should be strict invigilation by India as wells as other nations on the import of counterfeit products, as most of the counterfeits are made in China as first copy of the luxurious brands.

7. Conclusion

Counterfeiting is a growing day by day and it is a big problem, and actions are being taken to minimize the counterfeit trade on both national and international levels. One strategy is to combat counterfeiting to reduce the demand of consumer; thereby we can reduce the incentive to buy or produce counterfeits. This study gives an insight into what factors affect the purchase intention of counterfeits mobile phones and watches. Results revealed that counterfeit purchasers had lower perceptions of business ethics than non-purchasers, implying that ethical beliefs may become the key to develop the strategies to reduce demand for counterfeit products. Consumer ethical education programs might help to address ethical attitudes toward counterfeits. Results signify that individual preference, pricing of products and nationalist feeling of refuting harm to country plays an important role in purchase of counterfeit products in India. The study has implications for public policy. This study is not focused on a specific component of ethical behavior. We have also considered the variables within the theory of social control: attitudes toward counterfeits, perceptions of business ethics, consumer ethics, and culture. According to Penz & Stottinger [58] study

on Theory of Planned Behavior (TPB) studied the impact of self-Identity, fashion involvement and keenness to take risk with an objective to purchase counterfeits. The theories that have focused and related to occurrence of downloading and copying illegal software are Theory of Planned Behavior by Ajzen [59], Theory of Reasoned Action by Fishbein & Ajzen [60], and Expected Utility Theory by Neumann & Morgenstern [61]. According to Swami *et al.* [62] studies have examined counterfeit purchase in relation to the individual characteristics: ignoring or giving least importance to the moral beliefs and their social influence on buying behavior. The ethical perspective is based on the rule of reasoning which is on the universal laws and decision on what others are doing in the similar situation by Sims and Keon [63]; Wyld and Jones [64] or oneself and others regarding the moral approval. Our results assimilate with the Theory of Planned Behavior (TPB) and Theory of Reasoned Action. The Indian consumers are giving least importance to the moral beliefs. Further research can address limitations of the current study. Participants in this study were limited to North Indian respondents. To increase the generalization of the results, future research could survey with a wider variety of participants. Finally, in future research, any other product or luxury-brand or fashion goods might be included, or an open-ended questionnaire could be used whereby participants were asked to list their subjective views on purchase of counterfeit brands.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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Appendices

Appendix 1. Total variance explained.

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.117	21.323	21.323	5.117	21.323	21.323	4.120	17.167	17.167
2	3.667	15.280	36.603	3.667	15.280	36.603	2.860	11.918	29.085
3	2.483	10.348	46.951	2.483	10.348	46.951	2.761	11.503	40.588
4	2.007	8.363	55.314	2.007	8.363	55.314	2.070	8.624	49.212
5	1.337	5.571	60.885	1.337	5.571	60.885	1.979	8.247	57.460
6	1.217	5.070	65.955	1.217	5.070	65.955	1.717	7.154	64.613
7	1.044	4.349	70.304	1.044	4.349	70.304	1.366	5.691	70.304
8	0.958	3.992	74.296						
9	0.839	3.494	77.790						
10	0.824	3.432	81.222						
11	0.644	2.682	83.904						
12	0.591	2.462	86.366						
13	0.521	2.171	88.537						
14	0.485	2.020	90.557						
15	0.409	1.705	92.263						
16	0.392	1.633	93.896						
17	0.317	1.320	95.216						
18	0.270	1.127	96.342						
19	0.262	1.093	97.436						
20	0.159	0.664	98.100						
21	0.142	0.594	98.693						
22	0.127	0.527	99.221						
23	0.110	0.456	99.677						
24	0.078	0.323	100.000						

Extraction method: Principal component analysis.

Appendix 2. Rotated component Matrix^a.

Component	1	2	3	4	5	6	7
hurt economy							0.603
shop keeper give						0.765	
buy CF wise	0.794						
lookalike	0.715						
designer rover priced	0.684						
sell CF is crime			0.765				
buy CF is crime			0.874				
manufac CF is crime			0.807				
mislead price					0.842		
price tags change					0.860		
waitress miscalculate				0.698			
retursaleitem				0.777			
ethical social firm		0.802					
effective trughethic		0.853					
breaking rule		-0.527					
ethic for survival	0.620						
easy afford	0.790						
as good as design	0.741						
return damage own fault				0.693			
forget ethics							0.576
widout realizing						0.786	
ethic is business		0.686					
nohurt manufac	0.649						
social equal profit			0.532				

Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.
^aRotation converged in 9 iterations.