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Analyzing the Effects of Self-esteem and Personality Traits on the Purchase of Counterfeit Goods

(TITLE)

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1. INTRODUCTION

In simple words, counterfeit goods are fake goods that are almost identical to the original product but have been manufactured without the permission of the producer of that original product. There are many definitions used for product counterfeiting. The one which will be used in the current study was given by Cordell et al. (1996): “Any unauthorized manufacturing of goods whose special characteristics are protected as intellectual property rights (trademarks, patents and copyrights) constitutes product counterfeiting” (as cited in Matos, Ituassu, & Vargas Rossi, 2007). Yao (2014) says, “Counterfeiting, as a market behavior, lasts as long as the pleasure from consuming and super profit from producing exist.”

The issue of counterfeits has become a growing concern over the past few decades, especially in the current times. With the advancement of technology, producers of these fake goods are able to manufacture such close approximations of the original product, enabling the market of counterfeits to flourish. According to a 2008 study by the Organisation for Economic Co-operation and Development (OECD), the share of counterfeit and pirated goods was about \$200 billion in 2005. Accounting for growth and changing composition of trade from 2005 to 2007, the OECD suggested that counterfeit and pirated goods could have had a share of about \$250 billion in 2007 (OECD, 2009). This trade had been steadily growing from 2000-2007. Further, this study estimated that the share of such goods in the world trade increased from 1.85 percent in 2000 to 1.95 percent in 2007 (OECD, 2009).

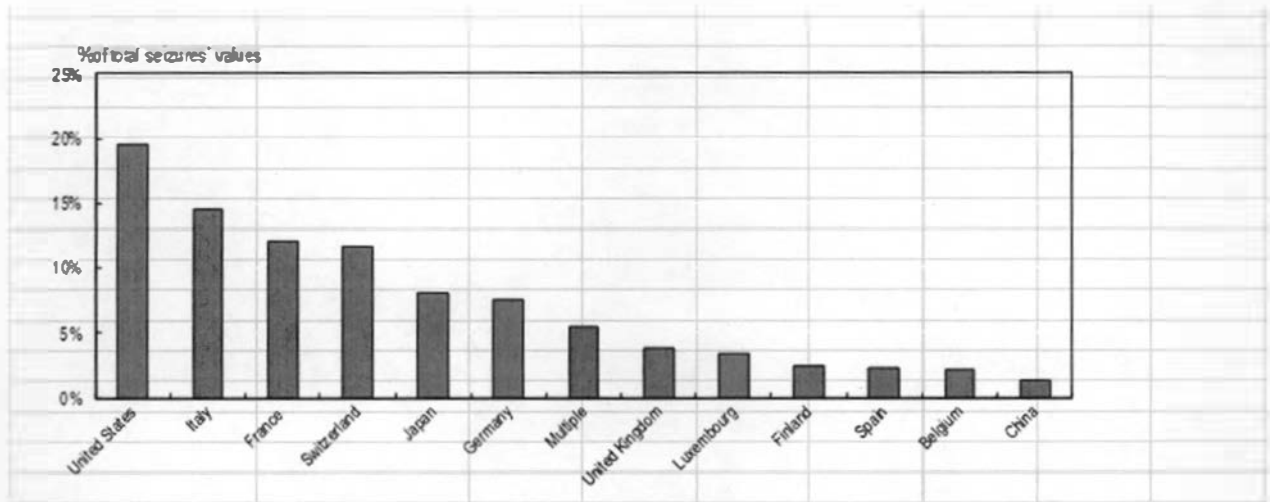
A newer report by the OECD and European Union’s Intellectual Property Office (EUIPO) in 2016 concluded that the worth of imported counterfeit and pirated goods was nearly one half of a trillion dollars per year (about 2.5 percent of global imports). The hardest hit are the U.S., Italian, and French brands (OECD/EUIPO, 2016). When comparing the total value of imported fake goods

worldwide and total imports in world trade, the former was about \$461 billion in 2013, and the latter was \$17.9 trillion (OECD/EUIPO, 2016). Finally, it is from middle income or emerging countries from where most these fake goods originate. China is the top producer. The International Trademark Association – Business Action to Stop Counterfeiting and Piracy (INTA-BASCAP) report forecasts that this illicit trade will reach an estimated \$991 billion by 2022 (International Trademark Association, n.d.).

Footwear is the most copied item, but fake products crop up in everything, ranging from watches, handbags, clothes, and perfumes to machine parts and chemicals. Counterfeiting not only is a bane for world trade and economies, but also produces knockoffs that endanger lives. For example, medicines that make people sick, auto parts that fail, medical instruments that deliver false readings, and toys that harm children, all pose a threat to people (OECD/EUIPO, 2016). The OECD report covers all physical counterfeit goods but not online piracy, which is a further drain on the formal economy (OECD/EUIPO, 2016). Being one of the wildest growing economic crimes globally, counterfeiting threatens the economies of developed and developing countries alike.

Figure 1 and Figure 2 show countries that are hit hardest by trade in fake goods and the countries where most fake goods originate.

Figure 1: Seizures of Counterfeit and Pirated Goods. Top Economies of Origin of right holders whose Intellectual Property Rights are Infringed (pooled dataset)



Source: Trade in Counterfeit and Pirated Goods: Mapping the Economic Impact

Figure 2: Seizures of Counterfeit and Pirated Goods: Top Provenance Economies (2011, 2012 and 2013)



Source: Trade in Counterfeit and Pirated Goods: Mapping the Economic Impact

China is the largest producer of counterfeit goods, where it has reached a critical level, approximating about 15 to 20 percent of all brand products (Yao, 2014). In July 2004, the China State Council estimated the market value of counterfeit goods to be about \$19 to \$24 billion annually. The sales of counterfeits from China globally are an estimated \$299 billion which, when compared to China's \$7 trillion worth of total retail sales of consumer goods, leads to the conclusion that counterfeiting is a substantial activity in the nation's economy (Yao, 2014). Thus, we can see that counterfeit goods are becoming an increasing concern in China.

When finding solutions to this issue of counterfeit goods, most studies study the supply side. They take the supply-side factors into consideration when trying to formulate public policies to fight counterfeiting. This gives us only one-half of the solution. The demand side is not considered often, which leads to policies being ineffective. Thus, the aim of this study is to study the determinants of human behavior such as self-esteem and personality traits including extraversion, openness to new experiences, neuroticism, and conscientiousness, and how they affect the likelihood of purchasing counterfeit fashion products. This study is different from others in that it is more consumer-centered. This study will examine why consumers demand counterfeit goods and if producers of such goods thrive on these aspects of human behavior.

2. LITERATURE REVIEW

Numerous studies have been done on the purchase and purchase intention of counterfeits. Sarial-Abi and Gürhan-Canli (2012) conducted a study taking high-end counterfeits specifically to see how they affect the intention to purchase one. Their study extended the literature by demonstrating that the functional and symbolic benefits offered by high-end counterfeits influence purchase intentions (Sarial-Abi & Gürhan-Canli, 2012). According to the study, the functional benefit of a good is how that good can be put to use and its attributes relate more to the intrinsic

aspects of product consumption. On the other hand, symbolic benefits are more for social approval and personal expression, or, relating to the extrinsic advantages of product consumption (Sarial-Abi & Gürhan-Canli, 2012).

The study found that those with a high need for self-presentation are more likely to buy high-end counterfeits because of the symbolic benefits that these goods have to offer. However, they also found that those who have a low need for self-presentation buy high-end counterfeits, but only when functional benefits are offered by these counterfeit goods (Sarial-Abi & Gürhan-Canli, 2012). Thus, this study gives us very good information for why a person may or may not purchase a counterfeit, based on his or her own self-presentation need and the kind of benefit that the counterfeit good provides.

Another study, conducted by De Lucio and Valero in 2013, studied how moral judgement, both collective and individual, can influence the acquisition of counterfeit goods. The study had interesting results: it found that more severe moral judgment in relation to the purchase of counterfeits (both of acquaintances and of the consumer) reduced purchase intention and actual purchases (De Lucio & Valero, 2013). The acquaintances have more influence than one's personal moral judgment mainly on purchase intention. However, at the time of actual purchase, individual judgment acquires higher relevance, while acquaintances reduce its impact.

The majority of the studies focus on personal characteristics (e.g., age, sex, family status, occupation or income, ethics, and moral principles), characteristics of the original product and those of the counterfeit (e.g. apparent quality, durability, aesthetics, price or the degree of overlap with the original), and social context. In the social context, the availability, the risks perceived by the consumer (e.g. financial, legal, operational risks, health consequences, harassment), institutional factors (e.g. legal, police), and cultural factors (e.g. social pressure) are included.

A study by Hans, Nunes, & Dreze (2010) focuses on brand's identifying marks. To appeal to different types of consumers, brand manufacturers can produce goods with "loud" or clearly visible branding or "quiet" or inconspicuous branding (Hans, Nunes, & Dreze, 2010). The results show that based on the level of need for status, consumers can purchase "loud" or "quiet" products. We can see how less expensive, louder products are directed towards a different class of customers than are subtler, more expensive goods. Further, the results help in understanding how luxury-goods manufacturers use this to their advantage by targeting two types of customers simultaneously (Hans, Nunes, & Dreze, 2010).

Amine & Magnusson (2007) approached their study by putting consumers in the center of their analysis. A well-established theory by Fishbein (1980), called the theory of reasoned action, was used as the basis of this study. Fishbein's theory is about the roles of both consumer cognition and affect in the formation of attitudes towards a given object (a fake Prada purse) or towards an act (buying from a flea market). The theory also says that people disregard the negative consequences of purchasing fake goods because the emotional needs to be fashionable and to comply with the expectations of peers overpower the cognitive awareness of those negative consequences. These motivations and attitudes need to be factored into an analysis of consumer involvement in the counterfeit market, or else public policy and corporate resistance actions will no doubt miss their mark and remain ineffective. Hence, we can see that placing consumers in the center of the analysis is extremely important.

There have been some studies in the past that have studied that influence of self-esteem and personality traits on shopping and consumption behavior. Some even study relationship between these aspects of human behavior and the purchase of counterfeits. The hypotheses of the current study will be derived from the studies mentioned below.

A study conducted by Kassarian (1971) is more of a theoretical layout of different theories of personality and consumer behavior. One mentioned is that of the 'real-self' and 'ideal-self.' The real-self is what a person owns: the material possessions, family, or friends. If put in terms of willingness or likelihood of purchasing counterfeit goods, if a counterfeit makes an individual's real-self closer to the ideal-self, then he is more likely to purchase that good (Kassarian, 1971). Similarly, if a person has low self-esteem, which means that his self-concept is not perceived to be high, he will be willing to buy products that increase his self-esteem levels and bring them closer to his ideal self.

Compulsive buying behavior can be defined as "a chronic, abnormal form of shopping and spending characterized, in the extreme, by an overpowering, uncontrollable, and repetitive urge to buy, with disregard for the consequences" (DeSarbo & Edwards, 1996). DeSarbo and Edwards (1996) found that psychological traits such as low self-esteem, depression, dependence, lack of impulsive control, approval seeking, anxiety, materialism (envy), isolation, perfectionism, and excitement seeking, are linked to compulsive buying to a certain degree. Following this, the first hypothesis of this study is:

H1: The relationship between level of self-esteem and purchase of counterfeit goods is negative.

Even though personality is such an important aspect of consumer behavior, the role of personality traits on impulse buying and variety seeking is not conclusive. Olsen, Tudoran, Honkanen, and Verplanken (2016) did a study to find which Big Five personality traits are associated with impulse buying and the results were that 'Neuroticism' predicted impulse buying positively but variety seeking negatively. Further, openness to experience was a strong predictor of variety seeking but was unrelated to impulse buying.

It is also suggested in the study that high neuroticism and low conscientiousness are the two most important personality traits characterizing impulse buyers. Conscientiousness is significantly and negatively related to impulse buying (Olsen et al., 2016). This is so because consumers who are conscientious have a better self-discipline, are goal-directed and stay inclined to their plans; they have the ability to control impulses and reactions. Lastly, a significant association of extraversion with impulse buying was found (Olsen et al., 2016). A study by Thompson and Prendergast (2014) showed similar results. It found that extraversion, conscientiousness, and neuroticism are consistently able to predict impulse buying.

In another study, Mueller et al. (2010) examined personality prototypes based on the Big Five factor model. There were two distinct personality groups. The results found that subjects in the group with higher scores on neuroticism and lower scores on the other four dimensions compared to the first group showed higher degree of compulsive buying and lesser control over its symptoms. They were more anxious, interpersonally sensitive and impulsive as well. This implies that high neuroticism leads to compulsive buying behavior (Mueller et al., 2010).

Finally, Huang and Yang (2010) found that personality traits can be strong predictors of online shopping motivations. More specifically, people with higher openness to experiences tend to shop online to experience new adventure and ideas. Extraverts shop online in response to social motivation, and conscientious people for convenience. Finally, those who are highly neurotic are motivated to shop online by the need not to socialize (Huang & Yang, 2010). This study is very useful in hypothesizing the relationship between openness, extraversion, conscientiousness and neuroticism to that with purchase of counterfeit goods.

Analyzing the above-mentioned studies, the remaining hypotheses for this study are as follows:

H2: The relationship between openness to experiences and purchase of counterfeits is positive.

H3: The relationship between conscientiousness and purchase of counterfeits is negative.

H4: The relationship between extraversion and purchase of counterfeits is positive.

H5: The relationship between neuroticism and purchase of counterfeits is positive.

This study does not take the fifth personality dimension, agreeableness, in consideration due to lack of conclusive information from the literature.

3. METHODOLOGY

To investigate the effects of self-esteem and personality traits on the purchase of counterfeit goods, an online survey was given out to people. The survey had 3 parts: the first was a questionnaire that had questions regarding the individual's attitudes towards counterfeit goods, the intention to purchase them, and a final question about the frequency of purchase. The second part of the survey was a self-esteem test which was taken from a well-know and reliable test called the Rosenberg Self-esteem Scale. This test was used to measure the self-esteem level of the participants. Finally, the third section of the survey was a personality test and this study used the Mini-IPIP (International Personality Item Pool-Five-Factor Model) test, which is a popular 20-item measure of Big Five personality, used in academic research. The online survey was distributed in India and in the United States of America. A total of 220 responses were received, and after filtering and removing incomplete surveys, 178 responses were used for the study.

3.1 Dependent Variable

The dependent variable was not continuous because the response for the question of concern, the frequency of purchase of counterfeit goods, had the following five choices: (1) never, (2) once in a lifetime, (3) yearly, (4) every 6 months, or (5) I buy them all the time. Hence, the

dependent variable “purchase” had five categories, each corresponding to the above-mentioned choices: (1) Never, (2) Very rarely, (3) Rarely, (4) Often, and (5) Very often.

3.2 Independent Variables

The independent variables for this study were self-esteem, openness to experience, conscientiousness, extraversion, and neuroticism. All of these are continuous in nature.

3.3 Description of Variables

Self-esteem

According to the American Psychological Association (APA) dictionary of psychology, self-esteem is defined as, “The degree to which the qualities and characteristics contained in one’s self-concept are perceived to be positive.” (Self-esteem, n.d.). It includes an individual’s view of her accomplishments, values, capabilities, and perceived success. Finally, self-esteem includes how a person sees her worth in the eyes of others. This means that a person who has more of these positive qualities and characteristics is high on self-esteem and vice versa.

Personality is our pattern of behavior across different situations. It is defined by the APA as, “The enduring configuration of characteristics and behavior that comprises an individual’s unique adjustment to life, including major traits, interests, drives, values, self-concept, abilities, and emotional patterns” (Personality, n.d.). There are numerous theories of personality and of how personalities are formed. The one that will be used in the current study is the Five Factor Model of Personality. It has five dimensions, abbreviated OCEAN, which stands for Openness to experience, Conscientiousness, Extraversion, Agreeableness, and Neuroticism. Each dimension explains some aspect of an individual’s personality.

Openness to Experience

Openness to experience refers to an individual's willingness to try new things. Someone with a high level of openness loves to learn new things, tends to have a big imagination, and prefers variety. On the other hand, someone low in openness tends to stick to her comfort zone and prefers routine (Openness to experience, n.d.).

Conscientiousness

Conscientiousness refers to the way an individual gets something done. Someone with a high level of conscientiousness prefers to plan ahead to do a task dutifully and finishes them right away, pays attention to details, and spends time preparing. Those with low levels of conscientiousness prefer spontaneity and do not like schedules. They also tend procrastinate important tasks and are messy (Conscientiousness, n.d.).

Extraversion

Extraversion refers to how an individual interacts with others and draws energy. Someone who has an extraverted personality feels energized from socializing, likes to start conversations, has many friends and finds it easy to meet new people. On the other hand, those low on the extraversion scale prefer being alone and feel exhausted from socializing too much (Extraversion, n.d.).

Neuroticism

Neuroticism refers to an individual's ability to remain balanced and stable. Someone high in neuroticism tends to experience a lot of anxiety and worries about things easily. Her mood changes a lot as well. On the other hand, someone low in neuroticism doesn't worry often and tends to be emotionally stable (Neuroticism, n.d.).

3.4 Model Specification

Based on the review of literature relating the association between self-esteem and personality traits with purchase of counterfeit goods, we will estimate the following model using an ordered probit model:

$$\text{Oprobit } Y_i = \beta_0 + \beta_1 SE_i + \beta_2 O_i + \beta_3 Cn_i + \beta_4 E_i + \beta_5 N_i + \varepsilon_i$$

Where,

β_0 = Constant term

Y_i = The ordered category of the dependent variable

β 's = Coefficients of the marginal effects

ε_i = Stochastic error term

SE = Self-esteem

O = Openness to experience

Cn = Conscientiousness

E = Extraversion

N = Neuroticism

Descriptive statistics on the various factors will be discussed in the next section. Ordered Probit regression estimation will be used to achieve the study's objectives. One foremost important characteristic of using this technique is the categorical nature of the dependent variable.

4. RESULTS AND INTERPRETATION

This section provides an explicit analysis and interpretation of the results of the econometric methods and tests employed in carrying out the study.

4.1 Descriptive Statistics

Table 1: Descriptive Statistics

Variable	No. of Obs	Mean	Std. Dev.	Min	Max
Purchase	178	2.31	1.12	1	5
Self-esteem	178	22.03	5.02	3	30
O	178	45.19	23.32	2	85
Cn	178	65.24	21.08	16	95
E	178	62.65	22.04	16	97
N	178	50.98	21.50	11	95

Table 1 shows the overall means, standard deviations, minimums, and maximums for each variable in the study. The maximum possible score for self-esteem is 30 and that for the rest of the independent variables is 100. The maximum score possible for the dependent variable is 5. As can be seen, the mean for the dependent variable purchase, which tells us the frequency of purchase of a counterfeit good is 2.31. This tells us that on average, people tend to buy counterfeit products between the categories “once in a lifetime” and “yearly” which in the study are defined as “very rarely” and “rarely”, respectively. The means of the variables self-esteem, conscientiousness (Cn), and extraversion (E) are 22.03, 65.24, and 62.65, respectively. These means are in the upper half of their ranges. The mean of openness to experience (O) is 45.19, which is a little below the 50 percent mark. Finally, the mean of neuroticism (N) is 50.98, which is right about at the 50 percent mark.

Table 2: Sample Means by Purchase Category

	Purchase Category				
	Never	Very Rarely	Rarely	Often	Very Often
Self-esteem	21.98	22.52	21.17	22.14	22.00
O	42.04	45.17	49.25	44.48	47.38
Cn	69.72	63.71	65.58	60.43	62.63
E	60.94	61.14	62.47	69.52	67.88
N	52.96	45.50	54.56	55.52	56.5
No. of Obs	47	66	36	21	8

We can see from Table 2 that the mean self-esteem score does not change much as we move from never to very often. Next, the mean openness to experience and extraversion scores increase as we move from never to very often, and those of neuroticism increase somewhat. Lastly, the mean conscientiousness score decreases as we move from never to very often.

4.2 Results (marginal effects)

After estimating the ordered probit model, the coefficients were converted to marginal effects in order to estimate how a unit change in each independent variable impacts the probability of falling in a particular purchase category (never, very rarely, rarely, often, very often).

Table 3: Estimated Marginal Effects of Self-esteem and Personality on Purchase Behavior

	Never dy/dx (std. error)	Very Rarely dy/dx (std. error)	Rarely dy/dx (std. error)	Often dy/dx (std. error)	Very Often dy/dx (std. error)
Self-esteem	0.0019 (0.006)	0.0003 (0.0009)	- 0.0008 (0.0024)	- 0.0009 (0.0028)	- 0.0005 (0.0017)
O	- 0.0011 (0.0011)	- 0.0002 (0.0002)	0.0005 (0.0005)	0.0005 (0.0005)	0.0003 (0.0003)
Cn	0.0017 (0.0012)	0.0003 (0.0002)	- 0.0007 (0.0005)	- 0.0008 (0.0006)	- 0.0005 (0.0004)
E	- 0.0016 (0.0012)	- 0.0003 (0.0002)	0.0007 (0.0005)	0.0008 (0.0006)	0.0005 (0.0004)
N	- 0.0011 (0.0013)	- 0.0002 (0.0002)	0.0004 (0.0005)	0.0005 (0.0006)	0.0003 (0.0004)

* Significant at the 5% level

Table 3 depicts the results of the Ordered Probit model as marginal effects. As we can see, none of the independent variables are significant in this study. This means that there is no strong evidence to conclude the results of the study. Other results are as follows:

Self-esteem

- i) Never: A one-point increase in a person's self-esteem score increases the probability of never purchasing a counterfeit good by 0.19 percentage points, holding other variables in the equation constant.
- ii) Very rarely: A one-point increase in a person's self-esteem score increases the probability of purchasing a counterfeit good very rarely by 0.03 percentage points, holding other variables in the equation constant.
- iii) Rarely: A one-point increase in a person's self-esteem score decreases the probability of purchasing a counterfeit good rarely by 0.08 percentage points, holding other variables in the equation constant.
- iv) Often: A one-point increase in a person's self-esteem score decreases the probability of purchasing a counterfeit good often by 0.09 percentage points, holding other variables in the equation constant.
- v) Very often: A one-point increase in a person's self-esteem score decreases the probability of purchasing a counterfeit good very often by 0.05 percentage points, holding other variables in the equation constant.

Comparatively, as a person's score on the self-esteem scale increases by one point, the probability of never or very rarely purchasing counterfeit goods increases, whereas the probability of purchasing them rarely, often, or very often decreases. This shows us that people with higher self-esteem are less likely to buy counterfeit goods.

Openness to Experience

- i) Never: A one percentage point increase in a person's openness to experience score decreases the probability of never purchasing a counterfeit good by 0.11 percentage points, holding other variables in the equation constant.

- ii) Very rarely: A one percentage point increase in a person's openness to experience score decreases the probability of purchasing a counterfeit good very rarely by 0.02 percentage points, holding other variables in the equation constant.
- iii) Rarely: A one percentage point increase in a person's openness to experience score increases the probability of purchasing a counterfeit good rarely by 0.05 percentage points, holding other variables in the equation constant.
- iv) Often: A one percentage point increase in a person's openness to experience score increases the probability of purchasing a counterfeit good often by 0.05 percentage points, holding other variables in the equation constant.
- v) Very often: A one percentage point increase in a person's openness to experience score increases the probability of purchasing a counterfeit good very often by 0.03 percentage points, holding other variables in the equation constant.

Comparatively, as a person's score on the openness to experience dimension of the personality trait scale increases by one percentage point, the probability of never or very rarely purchasing counterfeit goods decreases, whereas the probability of purchasing them rarely, often, or very often increases. This shows us that higher the level of openness, the more likely people are to buy counterfeit goods.

Conscientiousness

- i) Never: A one percentage point increase in a person's conscientiousness score increases the probability of never purchasing a counterfeit good by 0.17 percentage points, holding other variables in the equation constant.

- ii) Very rarely: A one percentage point increase in a person's conscientiousness score increases the probability of purchasing a counterfeit good very rarely by 0.03 percentage points, holding other variables in the equation constant.
- iii) Rarely: A one percentage point increase in a person's conscientiousness score decreases the probability of purchasing a counterfeit good rarely by 0.07 percentage points, holding other variables in the equation constant.
- iv) Often: A one percentage point increase in a person's conscientiousness score decreases the probability of purchasing a counterfeit good often by 0.08 percentage points, holding other variables in the equation constant.
- v) Very often: A one percentage point increase in a person's conscientiousness score decreases the probability of purchasing a counterfeit good very often by 0.05 percentage points, holding other variables in the equation constant.

Comparatively, as a person's score on the conscientiousness dimension of the personality trait scale increases by one percentage point, the probability of never or very rarely purchasing counterfeit goods increases, whereas the probability of purchasing them rarely, often, or very often decreases. This shows us that higher the level of conscientiousness, the less likely people are to buy counterfeit goods.

Extraversion

- i) Never: A one percentage point increase in a person's extraversion score decreases the probability of never purchasing a counterfeit good by 0.16 percentage points, holding other variables in the equation constant.

- ii) Very rarely: A one percentage point increase in a person's extraversion score decreases the probability of purchasing a counterfeit good very rarely by 0.03 percentage points, holding other variables in the equation constant.
- iii) Rarely: A one percentage point increase in a person's extraversion score increases the probability of purchasing a counterfeit good rarely by 0.07 percentage points, holding other variables in the equation constant.
- iv) Often: A one percentage point increase in a person's extraversion score increases the probability of purchasing a counterfeit good often by 0.08 percentage points, holding other variables in the equation constant.
- v) Very often: A one percentage point increase in a person's extraversion score increases the probability of purchasing a counterfeit good very often by 0.05 percentage points, holding other variables in the equation constant.

Comparatively, as a person's score on the extraversion dimension of the personality trait scale increases by one percentage point, the probability of never or very rarely purchasing counterfeit goods decreases, whereas the probability of purchasing them rarely, often, or very often increases. This shows us that higher the level of extraversion, the more likely people are to buy counterfeit goods.

Neuroticism

- i) Never: A one percentage point increase in a person's neuroticism score decreases the probability of never purchasing a counterfeit good by 0.11 percentage points, holding other variables in the equation constant.

- ii) Very rarely: A one percentage point increase in a person's neuroticism score decreases the probability of purchasing a counterfeit good very rarely by 0.02 percentage points, holding other variables in the equation constant.
- iii) Rarely: A one percentage point increase in a person's neuroticism score increases the probability of purchasing a counterfeit good rarely by 0.04 percentage points, holding other variables in the equation constant.
- iv) Often: A one percentage point increase in a person's neuroticism score increases the probability of purchasing a counterfeit good often by 0.05 percentage points, holding other variables in the equation constant.
- v) Very often: A one percentage point increase in a person's neuroticism score increases the probability of purchasing a counterfeit good very often by 0.03 percentage points, holding other variables in the equation constant.

Comparatively, as a person's score on the neuroticism dimension of the personality trait scale increases by one percentage point, the probability of never or very rarely purchasing counterfeit goods decreases, whereas the probability of purchasing them rarely, often, or very often increases. This shows us that higher the level of neuroticism, the more likely people are to buy counterfeit goods.

Unfortunately, all the results are in the right direction, as predicted in the hypotheses, but they are not significant.

5. CONCLUSION

Even though the results were not significant, the direction we were looking for was achieved. The problem of counterfeit goods is a serious one, and from this study we have seen that people's characteristics might be one of the factors that is letting this illegal market flourish.

Hence, this study finds some results, focusing on the consumers and not the producers. It was found that, with higher levels of self-esteem and conscientiousness, people are less likely to purchase counterfeit goods. On the other hand, as the level of openness to experiences, extraversion, and neuroticism increases, people are more likely to purchase such goods.

5.1 Implications and Suggestions

First, we cannot control or change people's personalities, but counterfeit industries might be taking advantage of those who are vulnerable to buying their products. Hence, people need to be made aware of their tendencies and educated about the macro-economic consequences of their actions. Consumer demand of counterfeit goods plays a huge role in keeping this market going. Therefore, consumers need to take part in this battle against counterfeiting and not buy such products.

Second, an atmosphere of acceptance and equality in the society must be encouraged so that people do not feel the need to purchase duplicates of expensive brands to make themselves feel better or socially acceptable. In addition, people must be encouraged to buy indigenous goods that have been produced by local businesses and poor artisans so that their businesses and incomes are not washed away by these counterfeit industries.

Third, governments of countries need to impose stricter regulations and laws against counterfeiting because, in the end, it is really difficult to change people's traits and they can only be encouraged not to buy such goods. Stronger Intellectual Property Rights (IPR) must be put into place.

5.2 Opportunities for Further Research

Some opportunities for further research can be to look into cultural differences in trying to decipher if some cultures more readily encourage such behaviors of purchasing counterfeit goods,

or they condemn it. Another possibility is to study the interactions of gender with self-esteem and the personality traits considered in the current study. This may enable us to know which gender is more susceptible to such tendencies and better suggestions can be put forward to control the expansion of the counterfeit market. Effects of income level can be studied, and by doing so we may be able to understand which income bracket is most susceptible to buying counterfeit goods. Finally, experiments can be conducted in which it can be studied what kind of products people with different levels of self-esteem and personality traits prefer.

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