Counterfeits and Their Impact on Brand Equity of Original Products (Case Study: Clothing Industry in Tehran)

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Abstract
Today, using counterfeits is remarkably common in clothing industry. On this basis, present paper is conducted in clothing industry at Tehran due to the impact of counterfeit on brand equity of original products. It is a descriptive research. To achieve research aims, a sample consisting of 384 consumers in Tehran who bought counterfeits deliberately were selected. To analyze data and to test hypotheses, Structural Equation Modeling (SEM) and Confirmatory Factor Analysis (CFA) as well as LISREL and SPSS software packages were used.

By studying existing literature, six variable including personal gratification, value averseness, price-quality perception, ethical issues, subjective norm and perceived risk were considered as affecting factors on customers’ attitude on counterfeits. To measure brand equity, four aspects of Aaker’s aspects (perceived quality, brand consciousness, brand association and brand loyalty) were used.

Research findings indicate that personal gratification, value averseness, price–quality perception and perceived risk have a significant impact on attitudes towards counterfeits. Likewise, the impact of counterfeits on Brand Equity of Original products is also significant.

Keywords: Consumer Behavior; Counterfeits; Brand Equity; Clothing Industry.

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1. Introduction

Lai & Zaichkowsky (1999) have defined the counterfeit product as a similar product to the original one but with lower quality, reliability and durability compared with which one is built legally. Perhaps the earliest and most extensive counterfeiting process is making and printing fake money. Counterfeit and illegal utilization of consuming/industrial goods is considered as an important global problem and it is seen in developing countries more than developed ones. New concern indicates the fact that consumers do not conceive that their behavior can be damaging for a given industry or it can lead into a social cost (Lysonski & Durvasula, 2008). They only consider social advantages of counterfeits.

Based on the Agreement on the Commercial Aspects of Intellectual Property (WTO Agreement), counterfeits are those products which carry an illegal trademark and breach the rights of trademark owner under the laws of importing country. Although it is not a new phenomenon, we are observing its expansion during past two and three decades (Eisend & Schuchert Guller, 2006). It is estimated that the value of counterfeits in global market has increased 1100% between 1984 and 1994. Recent statistics estimate that counterfeits constitute 7% of total global commerce in 2004 (Balfour, 2005).

Counterfeit manufacturers are particularly operating in emerging economies in the format of businesses since they face with low risks compared to their macro profits. Slow legal procedures and the existence of legal gaps and law enforcement as well as the low rate of punishments and convictions have caused that counterfeits are emerged and bloomed. Therefore, economic development and corruption are related to areas with incremental levels of counterfeiting (Santos & Ribeiro, 2006).

Although consumers are well aware of ethics on buying counterfeits, previous researches indicate that almost one third of consumers purchase counterfeits deliberately (Phau et al, 2001; tom et al, 1998). Since demand is always considered as a key factor in the market, some authors argue that consumers’ demand is a main reason of existence and increasing counterfeiting phenomenon (Gentry et al, 2001; Ang et al, 2001). Thus, academic authors and marketers should study the behavior of consumers and counterfeits
carefully. Except than Bian and Moutinho (2009), a few researches are conducted on this issue why consumers purchase counterfeits deliberately and do not consider various aspects of a brand without respecting the fact decision on purchasing counterfeits is not only a decision to select a product but also and more important is a decision on a brand.

Customers’ tendency toward counterfeits can lead into severe damages on the brand equity of original brands (Bian & Mutinho, 2011). Many counterfeits provided as original and credit brands do not have the quality and traits of original brands which can dissatisfy customers and weaken customers’ attitudes and, finally, brand equity of original products and seriously hurt manufacturing companies and brand owners so that in USA, the costs of counterfeiting is over US$250 billion per year for businesses (Norum & Cuno, 2011). U.S. Chamber of Commerce (2006) has announced that counterfeiting has caused that more than 750,000 job to be destroyed annually in USA.

Clothing industry is an industry which has remarkably grown in the world. As a product, clothing can be seen in two perspectives: first, it is considered as a basic need of human and, second, clothing has attracted men’s interests and tastes due to consumerism. It has promoted counterfeiting in clothing industry. Considering both perspectives, one can find the role and status of clothing industry in today community. Due to its high margins, clothing industry has highly attracted many counterfeitors. In fact, increasingly development of clothing industry and consumers’ propensity can be considered as the most fundamental motivations of counterfeiters to penetrate this industry. Concerning above facts, present paper tries to measure the impact of consumers’ attitude toward counterfeits on the brand equity of original products.

2. Research Theoretical Basics
2.1.Affecting Factors on Attitude toward Counterfeits

Various factors impact on people’s propensity to counterfeits especially those products that are provided with luxury brands. Generally, consumers are encouraged to buy counterfeits due to some of their facial and apparent traits and they do not respect their quality (Koordel et al, 1996). An apparent trait of
Counterfeits is their prestige since they use the name of credible brands. Additionally, authors have identified other factors which impact on attitude toward counterfeits such as economic issues, quality, legal prohibitions, ethics, risk averse, social impacts, quality – price relationship, etc. (Eisand & Schuchert, 2006; Ang et al, 2006; Sahin & Atilgan, 2011; Phau et al, 2009, De Matos et al, 2007). In present study, the fullest range of such factors are identified based on a comprehensive study of existing literature and it is planned to test the impact of such factors on attitude toward such products and decisions to buy them. Figure 1 depicts research conceptual model. Below, each variable and the relations among them are explained.

2.1.1. Personal Gratification
Personal gratification or personal need for success feeling relates to social cognition and enjoying the life (Ang et al, 2001). On this basis, people with more success and social cognition feeling who enjoy their life have also higher personal gratification. Those consumers, who select a counterfeit see themselves in lower financial situation, lower self – esteem and lower success and lower status than those who do not buy counterfeits. Although the shoppers of counterfeits are aware of the low quality of such products, they keep on purchasing them since the average quality level of such products is admirable for them. Baluch et al (1993) say that those consumers, who select counterfeits believe that they are in lower financial situation, lower self – esteem and lower status and success than those who do not buy such products. Authors believe that people with lower personal gratification are more tended to buy counterfeits. On this basis, we have:

**Hypothesis 1**: personal gratification impacts negatively on people’s attitude toward counterfeits.

2.1.2. Value Averseness
Value averseness is considered as personal concern and sensitivity to pay lower prices, provided that some qualitative limitations are defined (Phau et al, 2009). It means that consumers who are aware of value tend to buy products that have admirable quality despite of their cheaper prices. Counterfeits may have lower quality than original ones but they are cost effective for customers due to their price. It means that with counterfeits with trivial quality
difference to original ones lead to saving in costs since in most cases, the prices of counterfeits are very lower than original ones. In this case, for value averseness customer, perceived value for counterfeits is high (Farnheim & Elgrisson, 2007). Baluch et al (1993) indicated that when a counterfeit has price advantage to original one, consumers would select counterfeits. Therefore, one can conclude that value averseness has a negative impact on attitudes toward brand counterfeits (Fernandes, 2013). Therefore:

**Hypothesis 2:** value averseness impacts negatively on people’s attitude toward brand counterfeits.

### 2.1.3. Price – Quality Perception

Past research shows that price difference is an important variable in selecting counterfeits (Koordel et al, 1996). Price – quality perception refers to this general belief that more expensive products have better quality. The impact of this factor of attitude is sometimes even more than the impact of having information about the quality of the product. It means that if someone has information on the good quality of a product but faces with its low price, he would neglect such information and feels that the product lacks expected quality (Huang et al, 2004). Authors have mentioned that counterfeits with generally lower prices stimulate price – quality perception and people imagine that these products have lower quality (De Matos, 2007). On this basis, stronger quality – price perception and more sensitivity to this general belief, more negative attitude toward counterfeits. Therefore:

**Hypothesis 3:** price – quality perception impacts negatively on people’s attitude toward counterfeits.

### 2.1.4. Ethical Issues

It refers to ethical or unethical believe on buying counterfeits by people. Buying counterfeits by consumers is not a criminal act. However, if the buyer participates in counterfeit transaction and purchases such goods, he/she has supported an illegal act. Consumers’ respect to law may be a factor which determines the rate of accepting counterfeits by them. In fact, the findings of researches indicate that consumers’ propensity toward buying counterfeits has a negative relationship to being legal (Koordel et al and de Matos, 2007; Sahlin & Atligan, 2011). It means that when consumers are more legal oriented, it is
less possible they buy counterfeits (Kozar & Marcketti, 2011). On this basis, it is expected that consumers with less ethical standards feel less guilty in buying counterfeits (Ang et al, 2001). Even, such people attempt to show their behavior logic and invite other people to such behavior in order to mitigate the cognitive incompatibility resulted from unethical counterfeits buying. Therefore:

**Hypothesis 4:** ethical issues impacts negatively on people’s attitude toward counterfeits.

### 2.1.5. Subjective Norm

Subjective norm is a social factor which leads into perceived social pressure to do or not to do a given behavior (Ajzen, 1991). Based on subjective norm, consumers may be influenced by their friends, acquaintances and friends in selecting and buying their needed goods. Concerning counterfeits, friends or acquaintances may act as preventer or encourager. However, it depends on how such behavior is admired by them. On this basis, one can say that those consumers whose friends and acquaintances encourage and confirm the behavior of buying counterfeits and are more impacted by subjective norm enjoy more favorable and positive attitude toward counterfeits (De Matos et al, 2007). Therefore:

**Hypothesis 5:** subjective norm impacts positively on people’s attitude toward counterfeits.

### 2.1.6. Perceived Risk

Counterfeits are sold by lower prices and weaker guarantee so people feel more risk when they purchase them. In marketing literature, perceived risk is defined as consumers’ conception on lack of confidence and unfavorable consequences of a product or service (Dowling & Staelin, 1994). On this basis, consumers feel that there may be a problem in the product and such judgment would impact on all steps of decision making process. According to authors, risk factor plays a vital role in the process of buying products especially counterfeits (Albers – Miller, 1999; Riquelme & Sayed Abbas, 2012). Some risks to which consumers are faced when they buy counterfeits include:

- Counterfeits may lack performance as proper as original products and there may be no guarantee from the seller for counterfeits.
• Select counterfeits will not involve expected saving.
• Counterfeits may not be as safe as original products.
• Selecting counterfeits impacts negatively on attitudes toward their shoppers.
• Since purchasing counterfeits may lead into repurchase, it will waste the time (De Matos, et al, 2007).

So, one can say that those consumers who perceive the risk of counterfeits more would have a negative attitude toward them.

Hypothesis 6: perceived risk impacts negatively on people’s attitude toward counterfeits.

2.2. Attitudes toward Counterfeits and Brand Equity
In brand arena, connoisseurs have provided varied definitions on brand equity. Brand equity is (1) a set of assets and debts related to brand, name and symbol which mitigate/add the provided value by a product or service for customers, (2) the clear impact on brand knowledge on consumers’ response to brand marketing, (3) the strength which brand may acquire in the market through name, symbol or logo, and finally (4) added value or awards of a product to customers attributed to brand name (Yoo et al, 2000; Anand et al, 1998; Keller, 1993). Therefore, brand strength is hidden in what customers learn, feel, observe or hear about the brand over time and by acquiring experiences (Keller, 2001). Konecnik and Gartner (2007) define customer – based brand equity consisting of four aspects namely Awareness, image, quality and loyalty. Consciousness refers to people’s capability in identifying a brand and trademark which provides a certain rank of product. Brand image originates from various conceptions of consumers about the brand. Quality means the quality of products and services provided by the brand. Brand loyalty is shaped by positive perceptions and feelings toward a brand and lead into repurchase (Martinez et al, 2009).

Below, each aspect of brand equity is explained in Aaker’s perspective.

Brand perceived quality: Brand perceived quality is consumers’ judgment on overall goodness/badness of the products/services in terms of its aims of expected aims compared to other products/services in the market.
It should be noted that many today companies have changed customer – oriented quality to a powerful strategic tool. They satisfy customers’ needed value by meeting customers’ needs and preferences on quality continuously and profitably.

Brand consciousness: Brand consciousness is perceived by recognizing and reminding the brand. In fact, brand consciousness is defined as potential capability of recognizing and remembering that brand is a member of a given product category.

Brand equity refers to the fact that how many people throughout the world know trademark even if they have heard its name.

According to Keller’s definition, brand consciousness plays an important role in customers’ decision making through three advantages: learning advantages, consideration advantages, selective advantages.

Three types of consciousness:
1. Mental awareness: if people are asked about the brand, it will come to their minds immediately.
2. Consciousness without any help: it measures the popularity of the brand.
3. Conducted consciousness: audiences are asked: have they yet heard the name of a given brand? Do they know it or even its name?

Brand association: Brand association includes everything relates customer’s mind to the brand. Such association can relate to product, geographical location, company, rivals, retailers, shop, symbol, plan and/or lifestyle.

Types of associations in consuming merchandises:

Main associations related to product and other unrelated associations: brand personality, user’s profile, integrity and/or manufacturing country, social and cultural figures are, inter alia, unrelated indicators to product.

According to Acre (1991), brand association is a set of brand assets and debts and includes relations established between brand and consumer’s mind.

Brand loyalty: Brand loyalty is a relative biased behavioral reaction in shopping happens overtime. Such behavior causes that people tend to certain brands in their decision making and evaluation processes (Chaudhuri & Holbrook, 2001). Such reactions are a function of psychological and mental processes. Customers’ loyalty to brand leads into positive mouth – by – mouth propaganda, to create fundamental
barriers for rivals, to empower the company in responding to competitive threats, to create more sale and income and to mitigate customers’ sensitivity to rivals’ marketing efforts. High number of customers’ loyalty to a brand is considered as company’s asset and as a main index for brand equity. Likewise, the sensitivity of loyal customers to price changes is less than disloyal customers. In fact, loyalty leads into consuming goods repurchase. In marketing literature, brand loyalty is often synonym with such concepts as repeat purchase, preference, commitment and allegiance and they are used interchangeably (Sahin et al, 2011). Brand – customer relationship plays a vital role in brand loyalty (Fournier & Mick, 1999). Brand experience would lead into brand loyalty, active reference to

**Fig 1 Conceptual Model of Brand Equity of Original products based on those Affecting Factors on Attitude toward Counterfeits**

Note: PG- Personal Gratification; VA- Value Averseness; PQ- Price- Quality Perception; EI- Ethical Issues; SN- Subjective Norm; PR- Perceived Risk; AT: Attitude toward Brand of Counterfeits; BE- Brand Equity
brand and brand profit rising (Morrison and Crane, 2007).

According to authors, consumers’ positive attitude toward counterfeits has a reverse and weakening impact on the brand equity of original products (Sahin et al, 2011). More tendencies of customers to purchase counterfeits, less tendency to original products which weakens brand equity of original products. On this basis, hypothesis 7 is as below: Hypothesis 7: attitude toward counterfeits impacts negatively on Brand Equity of Original products Based on the theoretical background just presented, figure 1 shows the model proposed.

3. Research Methodology

3.1. Methodology

In present study, we look for studying those factors that influence over consumers’ attitudes on brand counterfeits and Brand Equity of Original products in clothing industry. Present study is a survey in terms of data collection and it is a descriptive research in terms of methodology. A questionnaire is used to gather data.

3.2. Questionnaire

In present study, eight variables including personal gratification, value consciousness, price – quality perception, ethical issues, subjective norm, perceived risk, attitude toward counterfeits and Brand Equity of Original products are measured.

To measure personal gratification, 4 items developed by Ang et al (2001), 3 developed items by Lichtenstein et al (1990) for value averseness, 3 items developed by Lichtenstein et al (1993), Huang et al (2004) and Atilgan (2011) for price – quality perception, 2 items developed by sahin et al (2011) for ethical issues, 2 items developed by Ajzen (1991) for subjective norm, 2 items developed by Dowling & Staelin (1994) for perceived risk, 4 items developed by Hiang (2009) and wang et al (2005) for attitude toward counterfeits and 8 items developed by Boil et al (2011), Aaker(1991) and Kimpakorn & Tocquier (2010) for brand equity (including: Perceived quality, Brand awareness, Brand association and Brand loyalty) are used. On this basis, research questionnaire includes 28 items. All items are devised by Likert five – scale (completely disagree, disagree, neither agree nor disagree, agree, completely
agree). Finally, the questionnaire was distributed by trained people.

3.3. Data Analysis Method
In present study, Structural Equation Modeling (SEM) test is used to analyze data and research hypotheses. SEM is a very strong multivariable analysis from multivariable regression family which helps the author to test a set of regression equations simultaneously. To study the reliability and validity of the questionnaire, Cronbach’s alpha ratio and variance average index are used. To measure the fitness of provided model, Confirmatory Factor Analysis (CFA) is applied.

3.4. Research Statistical Population and Sample
Present paper is conducted in clothing industry in Tehran due to the impact of counterfeit consumers’ belief on Brand Equity of Original products. To this end, research population consists of all population of Tehran City exposed by counterfeits and have bought such goods. Since research population is indefinite, sample volume is considered 384 by Cochran’s formula as follows:

\[
\frac{z^2 \cdot p \cdot q}{d^2} = \frac{1.96^2 \times 0.5 \times 0.5}{0.05^2} = 384
\]

To select research sample for answering, multistep cluster sampling method is used so that some shops that represented counterfeits were selected randomly and in different days the shoppers and attendees in such centers were randomly asked. 400 questionnaires were distributed of which 384 ones were returned.

3.5. Reliability and Validity of the Questionnaire
In order to analyze the internal structure of the questionnaire and determining its homogenous validity, the results obtained from "Confirmatory Factor Analysis" (CFA) and "Average Variance Extracted" (AVE) has been used and for this purpose "Standardized Factor Loading" and AVE index related to all of the items and the variables were computed. The validity is established when the amount of the whole standardized factor loadings related to each of the main variables is greater than 0.5 (Fornell & Larcker, 1981). Regarding the fact that the amount of factor loadings and AVE index is greater than 0.5, it can be concluded that this research questionnaire enjoys plausible validity. Also for
evaluating reliability, Cronbach’s alpha coefficient has been used. Cronbach’s alpha coefficient for all of the structures have been presented in table 1 all of which are greater than 0.7.

<table>
<thead>
<tr>
<th>Items</th>
<th>SFL</th>
<th>Cronbach’s α Value</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Personal Gratification</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel that I have a convenience life.</td>
<td>0.66</td>
<td>0.81</td>
<td>0.62</td>
</tr>
<tr>
<td>I have an enjoyable life.</td>
<td>0.66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Always, I try to feel success.</td>
<td>0.72</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Value Averseness</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>If feel concern on low prices and the quality of clothes.</td>
<td>0.80</td>
<td>0.84</td>
<td>0.62</td>
</tr>
<tr>
<td>When purchasing clothes, I always try to get a product with the highest quality proportionate to my payment</td>
<td>0.84</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generally, I compare the small differences in the prices of different brand when purchasing clothes</td>
<td>0.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Price-quality Perception</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Generally, the higher the price of a product, the higher the quality.</td>
<td>0.67</td>
<td>0.76</td>
<td>0.57</td>
</tr>
<tr>
<td>The price of a product is a good indicator of its quality.</td>
<td>0.72</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I always have to pay a bit more for the best.</td>
<td>0.68</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ethical Issues</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I think that it is an unethical behavior to buy counterfeited clothes.</td>
<td>0.73</td>
<td>0.86</td>
<td>0.55</td>
</tr>
<tr>
<td>As long as there is no legal prohibition on selling counterfeited clothing, ethics is not an important factor that needs to be considered.</td>
<td>0.89</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Subjective Norms</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>My relatives and friends approve my decision to buy counterfeited products.</td>
<td>0.89</td>
<td>0.84</td>
<td>0.56</td>
</tr>
<tr>
<td>My relatives and friends think that I should buy counterfeited products.</td>
<td>0.96</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Perceived Risk</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I do not take a risk when purchasing clothes.</td>
<td>0.73</td>
<td>0.94</td>
<td>0.62</td>
</tr>
<tr>
<td>Before purchasing clothes, I prefer to be assured of their quality.</td>
<td>0.80</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I do not like to feel suspicious when purchasing clothes</td>
<td>0.78</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Consumer Attitude toward Counterfeit Goods

<table>
<thead>
<tr>
<th>Statement</th>
<th>0.80</th>
<th>0.91</th>
<th>0.61</th>
</tr>
</thead>
<tbody>
<tr>
<td>Counterfeited products damage the economy.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Counterfeited production damages the manufacturers of original products.</td>
<td>0.77</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selling and buying counterfeit products is a way to attack big businesses.</td>
<td>0.81</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Counterfeited products prevent investments on innovation and brand building.</td>
<td>0.88</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Brand Equity**

<table>
<thead>
<tr>
<th>Statement</th>
<th>0.79</th>
<th>0.56</th>
</tr>
</thead>
<tbody>
<tr>
<td>I believe that products provided by Original Brands are in accordance with my expectations.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Original Brands supply very high quality products</td>
<td>0.74</td>
<td></td>
</tr>
<tr>
<td>I can distinguish Original Brands from other brands (counterfeited Brand)</td>
<td>0.87</td>
<td></td>
</tr>
<tr>
<td>Always, I have a good experience in using Original products</td>
<td>0.76</td>
<td></td>
</tr>
<tr>
<td>I remember the Original Brands attractive advertising</td>
<td>0.76</td>
<td></td>
</tr>
<tr>
<td>Upon hearing the names of Original Brands, I remember those logos in my mind</td>
<td>0.76</td>
<td></td>
</tr>
<tr>
<td>I am loyal to Original Brands.</td>
<td>0.77</td>
<td></td>
</tr>
<tr>
<td>I suggest using Original products to others.</td>
<td>0.74</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td>0.82</td>
</tr>
</tbody>
</table>

4. Research Findings

4.1. Research Descriptive Findings

To recognize the nature of studied community better and more familiarity with research variables, it is necessary to describe such data before analyzing them. As mentioned, 384 respondents were studied in present research of which 139 were male and 245 were female. Additionally, 222 were less than 25 – year – old, 130 were between 25 and 40 years old and 32 were above 40 – year – old. In terms of education, 35 were under diploma, 145 had diploma, 88 had associate of arts, 88 had Bachelor and 28 had masters and higher degrees. The results are depicted in table 2.

In the meantime, descriptive data on independent/dependent variables are shown in table 3. As seen, average, minimum and standard deviation are depicted in this table.
Table 3. Descriptive Data on Research Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Quantity</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Average</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personal gratification</td>
<td>384</td>
<td>1</td>
<td>5</td>
<td>3.7536</td>
<td>0.89533</td>
</tr>
<tr>
<td>Value averseness</td>
<td>384</td>
<td>1</td>
<td>5</td>
<td>3.5841</td>
<td>0.73031</td>
</tr>
<tr>
<td>Price – quality perception</td>
<td>384</td>
<td>1</td>
<td>5</td>
<td>3.4639</td>
<td>0.59427</td>
</tr>
<tr>
<td>Ethical issues</td>
<td>384</td>
<td>1</td>
<td>5</td>
<td>2.5505</td>
<td>1.00535</td>
</tr>
<tr>
<td>Subjective norms</td>
<td>384</td>
<td>1</td>
<td>5</td>
<td>3.1779</td>
<td>0.97534</td>
</tr>
<tr>
<td>Perceived Risk</td>
<td>384</td>
<td>1</td>
<td>5</td>
<td>2.6747</td>
<td>0.72487</td>
</tr>
<tr>
<td>Attitude toward counterfeits</td>
<td>384</td>
<td>1</td>
<td>5</td>
<td>2.5089</td>
<td>0.60407</td>
</tr>
<tr>
<td>Original brand equity</td>
<td>384</td>
<td>1</td>
<td>5</td>
<td>1.976</td>
<td>0.96247</td>
</tr>
</tbody>
</table>

4.2. Testing Model Fit

To determine the fitness of provided model by using CFA, various Goodness to Fit indicators are considered depicted in table 4. Overall, each used indicators in the model are not the only reason for fitness or unfitness but also they should be described along each other. Both \( \chi^2 \) and secondary fitness tests show that the model is adequately proper and they move toward the factors of the model and we focus on such factors. Table 4 indicates the most important indices and depicts that the model enjoy proper fitness. All indices indicate that the model is fit to observed data. Model fit indices show the appropriateness of measuring model since Chi 2 ratio on freedom degree is less than 3, RMSEA is less than 0.1 and other indices are also plausible. In other words, the overall model is significant and admirable.

Table 4 Model Goodness to Fit Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Achieved Rate</th>
<th>Allowed Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>( \chi^2 )</td>
<td>2012</td>
<td>-</td>
</tr>
<tr>
<td>Df</td>
<td>673</td>
<td>-</td>
</tr>
<tr>
<td>( \chi^2 )/df</td>
<td>1.53</td>
<td>&lt; 3</td>
</tr>
<tr>
<td>GFI</td>
<td>0.93</td>
<td>&gt; 0.9</td>
</tr>
<tr>
<td>RMSEA</td>
<td>0.070</td>
<td>&lt; 0.1</td>
</tr>
<tr>
<td>CFI</td>
<td>0.91</td>
<td>&gt; 0.9</td>
</tr>
<tr>
<td>AGFI</td>
<td>0.85</td>
<td>&gt; 0.8</td>
</tr>
<tr>
<td>NFI</td>
<td>0.97</td>
<td>&gt; 0.9</td>
</tr>
<tr>
<td>NNFI</td>
<td>0.98</td>
<td>&gt; 0.9</td>
</tr>
</tbody>
</table>
4.3. Testing Research Hypotheses

The results of testing research hypotheses based on SEM are shown in table 5. As seen, concerning t, hypotheses 1, 2, 3, 6 and 7 are supported. Hypotheses 2, 6 and 7 in 99% confidence level are supported. Also, Hypotheses 4 and 5 are rejected. On this basis, one can conclude that value averseness and perceived risk impact on attitude toward counterfeits in 99% confidence level. As well as Attitude toward counterfeits impacts on original brand equity in 99% confidence level.

Concerning the ratios on hypotheses, one can find the positive/negative and the rate of independent variables on dependent ones. Based on such ratios, one can conclude that the personal gratification, value averseness, price – quality perception, and perceived risk impact on attitude toward counterfeits and the impact of attitude toward counterfeits on original brand equity is linear, direct and negative.

It means that increase in value averseness; depended variable would decrease with ratio and vice versa. For instance, 1% increase in value averseness; likely 99% attitude toward counterfeits would decrease as 0.71% or will become more negative. The ratios of other variables can be described similarly.

The amount of the ratio regarding the impact of all independent variables on attitude toward counterfeits is 0.87 which shows that all independent variables have been able to predict 87% of dependent variable changes on attitude toward counterfeits and remained 13% relates to prediction error ad can include other affecting variables on attitude toward counterfeits.

The amount of the ratio regarding the impact of attitude toward counterfeits on original brand equity is 0.61 which shows that attitude toward counterfeits has been able to predict 61% of original brand equity changes and remained 39% relates to prediction error ad can include other affecting variables on brand equity.
Table 5 Research Hypotheses Test

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Indicator</th>
<th>t</th>
<th>β</th>
<th>r²</th>
<th>result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The Impact of Personal Gratification on Attitude toward Counterfeits</td>
<td></td>
<td>-2.32*</td>
<td>-0.68</td>
<td></td>
<td>Supported</td>
</tr>
<tr>
<td>2. The Impact of Value Averseness on Attitude toward Counterfeits</td>
<td></td>
<td>-4.00**</td>
<td>-0.71</td>
<td>0.87</td>
<td>Supported</td>
</tr>
<tr>
<td>3. The Impact of Price–Quality Perception on Attitude toward Counterfeits</td>
<td></td>
<td>-1.96*</td>
<td>-0.66</td>
<td></td>
<td>Supported</td>
</tr>
<tr>
<td>4. The Impact of Ethical Issues on Attitude toward Counterfeits</td>
<td></td>
<td>-1.40</td>
<td>-0.61</td>
<td></td>
<td>rejected</td>
</tr>
<tr>
<td>5. The Impact of Subjective Norm on Attitude toward Counterfeits</td>
<td></td>
<td>0.78</td>
<td>0.78</td>
<td></td>
<td>rejected</td>
</tr>
<tr>
<td>6. The Impact of Perceived Risk on Attitude toward Counterfeits</td>
<td></td>
<td>-3.20**</td>
<td>-0.79</td>
<td></td>
<td>Supported</td>
</tr>
<tr>
<td>7. The Impact of Attitude toward Counterfeits on Brand Equity of Original products</td>
<td></td>
<td>-11.35**</td>
<td>-0.83</td>
<td>0.61</td>
<td>Supported</td>
</tr>
</tbody>
</table>

** Significance in 99% confidence level. * Significance in 95% confidence level.

5. Conclusion and Recommendation

In recent years, cloth consumption had rapidly grown in Iran and it is now a luxury issue rather than meeting the need to clothes and it encourages all high, middle and low income classes to purchase such goods. Fascination, expansion and high profit of clothing industry has led into more production of counterfeits. Annually, millions of clothes with counterfeited brands are produced throughout the world and many customers are consciously and unconsciously to welcome and purchase them due to their lower prices. This industry has grown increasingly in recent years and it has motivated more tendencies toward counterfeiting exiting well – established brands. To this end, present paper identifies affecting factors on attitude toward counterfeits and its impact on original brand equity in clothing industry in order to provide guidelines to combat such crisis.

Initially, the present paper studies the impact of personal gratification, value averseness, quality – price perception, ethical issues, subjective norm and perceived risk on consumers’ attitude toward counterfeits and then it investigates the impact of attitude toward counterfeits
on brand equity of original products. The results of data analysis indicate that the impact of 4 variables including personal gratification, value averseness, quality – price perception, and perceived risk on attitude toward counterfeits and the impact of attitude toward counterfeits on brand equity of original products are significant. Also Personal gratification, value averseness, quality – price perception and perceived risk variables impact on attitude toward counterfeits negatively.

In view of these results, several suggestions are put forward:

- Policy makers should educate consumers about the negative impacts of counterfeit products, such as in relation to quality and safety standards.
- Manufacturers of clothing industry should consider lowering prices through the introduction of brand extension.
- Greater efforts are needed to emphasize the superior quality of original production.
- In some cases, companies could offer lifetime warranties to illustrate how original products offer greater value than counterfeits.
- Educational programs in schools and businesses needed a strong focus on morals and ethics.

On this basis and to improve the culture of refuse buying counterfeits in the society and to prevent its weakening and unfavorable impacts on well – recognized brand equity, one should strength the feeling of success and satisfaction in customers and society’s members, to reveal the brand equity of original products, to disseminate the public belief that expensive original clothes have better quality than similar counterfeits, to show the unethical advertising of counterfeits, to reveal the risk of purchasing counterfeits, to share adequate information to recognize original brands.

Finally this study is conducted only in Tehran. So, it is necessary to test it in other regions in order to extend its results. As well as identified beliefs have been able to clarify a part of attitude toward counterfeits and there may be other influential beliefs which can increase the ability of clarifying and forecasting attitude toward such and futures authors should identify them. Another
recommendation is used methodology. In present study, quantitative methodology is used to measure and model mental structures (such as belief and attitude). It is proposed that other researchers use qualitative methods and techniques such as in-depth interviews, contributive observance and so on to model and theorize in this regard.

Reference

toward counterfeits: a review and extension”, *Journal of Consumer Marketing*, 24(1), pp. 36-47.


محصولات جعلی و تأثیرشان بر ارزش ویژه برنده محصولات اصلی

(مطالعه موردی: صنعت پوشاش در تهران)

اسدالله کردننیج ۱، علیرضا بخشی زاده ۲ و حسین عسکری پور ۳

دریافت: ۲/۹۲ پذیرش: ۹۳/۳۰

امروزه به طور چشمگیری جعل محصولات در صنعت پوشاش مرسم شده است. بر این اساس، تحقیق حاضر با هدف بررسی تأثیر استفاده از محصولات جعلی بر ارزش ویژه برنده محصولات اصلی در صنعت پوشاش و در شهر تهران صورت گرفته است. تحقیق حاضر از نوع توصیفی می‌باشد. به منظور دستیابی به اهداف تحقیق، نمونه ۳۸۴ نفری از مصرف کنندگان شهر تهران که آگاهانه محصولات جعلی را خریداری می‌کرده، انتخاب گردید. جهت تجزیه و تحلیل داده‌ها و آزمون فرضیات، مدل و پرسشنامه تحقیق نیز از مدل‌سازی معادلات ساختاری (CFA) تحلیل عاملی تأییدی (SEM) استفاده شد.

با بررسی ادای شش متغیر «ضایعات خاطر شخصی»، «آگاهی از ارزش»، «برداشت قیمت»، «سایر اخلاقی»، «تهیه ذهنی» و «ریسک درک شده» به عنوان عوامل شکل‌دهنده و موثر بر نگرش مشتریان مبنای به محصولات جعلی در نظر گرفته شدند و برای اندیشادگری ارزش ویژه برنده تیز از چهار بعد ارزش ویژه برنده یکی از کیفیت (CFA) درک شده، آگاهی برنده، تداوعی برنده و وفاداری برنده (SEM) استفاده شد.

یافته‌های تحقیق نشان داد که عوامل یاده تأثیر معنی‌داری بر نگرش مشتریان نسبت به محصولات جعلی دارند و تأثیر استفاده از محصولات جعلی بر ارزش ویژه برنده محصولات اصلی نیز معنی‌دار بود.

واژگان کلیدی: رفتار مصرف کننده، محصول جعلی، ارزش ویژه، برنده، صنعت پوشاش

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