Understanding experienced consumers towards repeat purchase of counterfeit products: The mediating effect of attitude

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**ABSTRACT**

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Most counterfeit studies engage consumers’ intention to purchase without considering their past experiences. Understanding consumers who have experienced in counterfeit product situations and how this has influenced their actual perceptions, attitudes and behavior on this issue is important to understand. Therefore, this study aims to understand the repurchase behavior of experienced consumers in regards to counterfeit products and their demographics, past purchases, materialism, economic and social factors. In addition, this study also investigates the mediating effect of attitude on the relationship between the factors and the repurchase behavior. The participants are among 200 working adults who have purchased counterfeit products in a six-month period. Multiple regression analysis indicates that gender (female), past purchasing behavior, materialism and social factors had positive relationships with repurchase behavior. Remarkably, the economic factor is found to be significant. However, it has a negative relationship with repurchase behavior indicating that experienced consumers in counterfeit products purchase fake goods to minimize the economic effect. Hierarchical regression analysis indicates the mediating effect of attitude on the relationship between past purchase and materialism on repurchase behavior. The outcome of this study can also be used as a reference and knowledge base for scholars and marketers in understanding the attitude of consumers and their repurchase intention of counterfeit products.

**Keywords:**
Counterfeit
Repeat purchase
Demographic
Past purchase
Materialism
Social
Economic factor

1. Introduction

Global counterfeiting is one of the problems that is growing rapidly in today’s economy and there is not any sign of decline (Zhang et al., 2012). The Paris-based Business Alliance to stop Counterfeit and Piracy (BASCAP) estimated that the counterfeit and piracy markets are growing at 22 percent annually. Counterfeiting is the process of imitating the products of a brand, and illegally selling them in the market (also known as a “knockoff”). If this issue is not stopped (or at the very least, significantly reduced) now, it may become much worse in the future especially with the growing importance of online commerce (Shahbaz, 2019). The counterfeit products include tobacco, alcoholic and food products, clothes, watches and accessories, medicines, chemicals and pesticides, perfumes, cosmetics and body care products, as
well as CDs, DVDs, computer software and games (Europol, 2012). Counterfeiting may result in losses of profits for the company and in tax revenues for the government, inferior product risks for the consumer (Ferrel & Hartline, 2011), and it is also harmful to the economy (Ping et al., 2019). Europol (2012) reported that the companies are now competing with the counterfeiters as they are selling the fake products at cheaper prices. This is substantiated by the study conducted by Zhang et al. (2012) who revealed that the main factor that attracts consumers to buy counterfeit products is the price of the product. The pricing issue is one of the biggest challenges that marketing departments have to address. Price plays an important role in a business as it will help to determine the profit that the company will earn from the sales of their products. Some companies are selling their brand names, targeting high income groups. They set high prices for their products because they know that consumers positively relate high price to high quality.

The growing trend of counterfeit products in the market caused a concern as the Global Language of Business (2013) estimated that the rapid increase of counterfeit trade may reach USD 1.77 trillion by 2015. Based on the research done in 2007 by the Organization for Economic Co-operation and Development, it was found that the international trade on counterfeit and pirated products in 2005 could have been up to USD 200 billion, not including those counterfeit products being sold and distributed via the Internet. Researchers found that one of the major reasons for the increase in the number of counterfeit products is the technology advancement whereby the sellers can easily sell their products online without the need for business registration. Zhang et al. (2012) mentioned that the facilitator between the counterfeit online sellers and the consumers is the online intermediary and as a consequence they might be held responsible for any counterfeit products.

Due to this, Muhammad (2012) revealed that the purchase intention of counterfeit products is one of the problems faced by the world today as an effect of competitive battle of status. The issue of counterfeiting is becoming serious not only in Western countries, but also in Eastern countries. Counterfeiting is a problem because it will not only cause damage to the brand owners, but also becomes a serious threat to the government and the national economies, as well as to the welfare of the consumers (Othman et al., 2018, 2019a,b). Europol (2012) said that counterfeit products have a very damaging effect to the economy as the products are manufactured and smuggled into the market without paying any tax duties. This is supported by Amine and Magnusson (2007) who mentioned that counterfeit products can cause government to experience losses in terms of tax revenue as a result of the smuggling activities.

Furthermore, the original brand owners will experience loss of sales and eventually loss of brand equity. This will cost the companies especially if they do not have a patent or trademark to protect their brands and products. Additionally, the Global Language of Business (2013) reported that one of the biggest threats from counterfeits is customer safety and welfare as they may use or consume counterfeit food, medicines or tobacco which may cause serious health complications (Europol, 2012). This is due to the fact that the counterfeit food, medicines or tobacco are produced by using low quality of ingredients and they are also not being tested or approved by any reputable agency; for example, Ministry of Health for the pharmaceutical products being sold in Malaysia.

In addition, Staake et al. (2009) also stated that a rising momentum of counterfeiting markets is happening in Asia where there is less protection on the intangible assets. This is true as the numbers of counterfeit products are increasing year by year especially in China and Indonesia. The increases of counterfeiting around the world are supported by the availability of demand and supply in the market. Past researchers revealed that there are few studies conducted to investigate the demand side of the counterfeit issue. Therefore, this study is conducted to see on the demand side, to study on the factors influencing customer intention to repurchase counterfeit products in Malaysia. Previous researchers have done the study on purchase intention in other countries including South Korea, America and Indonesia. Thus, it is important to undertake this study to see the current situation in Malaysia, and to study the major factors influencing repurchase intention of counterfeit products and services.
Swami et al. (2009) revealed that most of previous researchers focused on the issues of supply of counterfeit products which includes product, price, shopping environment and country of origin. Cheung and Prendergast (2006) supported this notion when they also found a number of previous studies which focused on supply side and business strategies involved in counterfeit products. In addition, quite a number of counterfeit studies on consumer behavior focused on legal and legislative concerns of counterfeit products, for example the issue of intellectual property (IP) (Ahmad et al., 2014). However, the issues of the demand side are left unanswered. As only a few studies have focused on consumers who actually purchase and use counterfeit products (Fernandes, 2013), therefore, the present study aims to understand what factors lead to actual purchase of counterfeit products among experienced consumers. This is a different context as repurchase intention will only exist if that buyer has the experience, and knows how he/she feels to purchase counterfeit products. It is important to see the factors that influence intention to repurchase counterfeit products as one of the serious concerns is that the consumers do not realize that their action can bring harm to the economies as they tend to purchase again and again (Ahmad et al., 2014; Bestoon et al., 2018).

In addition, a number of studies have been conducted by previous researchers to understand the factors influencing intention to buy counterfeit products across countries. Fernandes (2013) conducted a research study to analyze the counterfeit purchase behavior in the UAE and the researcher suggested that future research should be conducted in other nations of deferent cultural background to know the similarities or differences in terms of purchase intentions as compared with the UAE. Phau et al. (2009) and Ping et al., (2019) also suggested that future studies should be conducted in other Asian and Western countries as there are significant differences in terms of economies and cultures that may lead to different attitudes and intentions to purchase counterfeit products. In sum, there were gaps in the identification of factors influencing intention to purchase counterfeit products. Due to these gaps, this study is conducted to identify the impact of demographic factors, past purchases, economic benefits, materialism and social factors on the repurchase intention of counterfeit products. The mediating effect of attitude on the relationship between the factors and repurchase intention will also be investigated. Therefore, from the gaps mentioned, it leads to the problem statement as to what extent does attitude towards counterfeit products and the repurchase intention is affected by demographic factors, past purchases, materialism, social factors and economic benefits amongst experienced consumers?

2. Literature review

2.1. Repurchase Intention

Purchase intention can be defined as a customer’s choice about a particular product or service (Ahmad et al. 2014). Repurchase intention means almost the same as purchase intention, the only difference is that repurchase intention refers to a customer’s choice about a particular product or service after having the experience of using the product or service. Repurchase intention can also be defined as the plan to repurchase again a particular product or service in the future after gaining experience of using and consuming. In addition, Stravinskiene et al. (2013) defined purchase intention as the willingness of the consumers to purchase. According to Damit et al. (2019), repurchase intention can be defined as an individual’s readiness to make repeat purchases of a product produced or manufactured by the same company. The willingness is usually based on the individual’s past experience of purchasing the product and the intention will in turn lead to a competitive advantage for the company as it creates loyalty and customer retention.

2.2. Demographic Factors

Wee and Cheok (1995) and Swami et al. (2009) suggested that future research should be conducted to study demographic factors, in order to see the influence of the factors towards repurchase intention. A study conducted by Swami et al. (2009) also suggested that future research could examine the impact of individual predictors or person-related factors towards purchase intention of counterfeit products. Yoo and Lee (2012) also revealed that future research should be conducted to identify other under-research
factors including person-related factors such as demographic factors. A study conducted by Yoo and Lee (2012) in Korea, using only a sample of female college students, and the research suggested that future studies should be conducted to both genders in order to eliminate bias. Wee and Cheok (1995) also stated in their research that there is a lack of studies being conducted to see the influence of demographic factors such as gender, income and age towards purchase intention of counterfeit products. From that, this research is conducted to eliminate bias with samples from both male and female consumers, as well as the other demographic factors that might influence repurchase intentions, including gender and income level. With this study being conducted to see the influence of age, gender and income towards repurchase intention; it will fill the gap from the previous researchers. Thus, the following hypotheses were developed:

H1: There is a significant relationship between gender and repurchase intention of counterfeit product.
H2: There is a significant relationship between age and repurchase intention of counterfeit product.
H3: There is a significant relationship between income and repurchase intention of counterfeit product.

2.3. Past Purchases

Past purchases or previous experience are important for this study as they differentiate between the consumers who have never bought counterfeit products, and consumers that have bought counterfeit products. For the context of this study, it will only focus on the purchaser, or the consumers who have bought counterfeit products and investigate their attitude as well as intention to purchase again in the future. Othman et al. (2018) found that the past purchases of counterfeit products do influence the intention to repurchase again in the future. Ahmad et al. (2014) also revealed that past experience of purchasing counterfeit products is one of the important determinants of the repeat purchase intention as it will help in creating positive attitudes and eventually becomes a new habit to the consumer. Once it has become a new habit to a particular consumer, it will be more difficult for them to stop, and as a result, they might have strong repurchase intentions of counterfeit products in the future. When consumers are satisfied with the products, this may also influence their family and friends to purchase the products too.

De Matos et al. (2007) revealed that purchaser and non-purchaser of counterfeits differ in their view of the products as the non-purchaser views it as unethical. With the application of TRB in this study, past purchase behavior is expected to create favorable or unfavorable attitudes toward counterfeiting and it will affect the repurchase intention of the counterfeits. With the previous experiences of buying counterfeits, the purchasers have better knowledge and understanding about the counterfeit products as compared with non-purchasers. Yoo and Lee (2009) found that past purchases of counterfeits do influence the intention to buy again in the future as the preference for the original has weakened once the consumers have tried counterfeits and have gotten used to it. Ong et al. (2013) research in Indonesia also found that once individuals purchase a counterfeit product or service and gets used to it, then it would be very difficult for them to stop. Further research conducted by Yoo and Lee (2009) suggests that future research should be conducted to examine the repurchase intention of counterfeit products as they found that purchase intention is strongly influenced by the actual purchase. However, other researchers found that past purchases do not influence purchase intention as some of the consumers can feel the differences between the counterfeit products and the original products. As a result, they refused to purchase again in the future and may opt to buy the original. Due to this contradiction in results, this study is conducted to see the influence of past purchases towards consumer repurchase intention of counterfeits in a developing country which is Malaysia. This is a very important variable. It differentiates between purchase and repurchase intentions. Hence, the following hypothesis is developed:

H4: There is a significant relationship between past purchases of counterfeit products and repurchase intention of counterfeit products.
2.4. Materialism

Phau et al. (2009) mentioned that the factor of materialism refers to the importance placed by consumers on the ownership of material things. Some consumers believe that this is their means of obtaining happiness by purchasing things that they like. Goldsmith et al. (2011) on the other hand defined materialism as the importance of material goods to a particular person and the impact that it has to the behavior of the person concerning the possession of material items. High level of materialism will affect the attitude of a person as well as the intention to purchase more goods, even though he/she does not afford to buy it. Ong et al. (2013) revealed that people with high level of materialism also tend to place greater value and emphasis on material rather than spiritual value and ethics. As a result, the consumer will go for the second alternative of the original luxury brand, which is the counterfeit product. This relationship is applying the TPB as Tsang et al. (2014) revealed that materialism leads to satisfaction that will in turn create a positive attitude towards counterfeit products and lead to the intention to repurchase.

In the context of counterfeit purchase, both counterfeits and original products can satisfy materialistic minds of many consumers since both products look-alike (Ong et al., 2013). The only differences are in terms of material and quality. However, it is hard to differentiate as an individual would appear almost the same regardless of whether he/she wears an original or a fake fashion product. Beliefs about materialism do account for difference in people’s willingness to buy counterfeit goods (Furnham & Valgeirsson, 2007). However, Ong et al. (2013) found that materialism is an insignificant antecedent of purchase intention. Thus, this study is conducted in order to see the result in a Malaysian context. In addition to that, Phau and Teah (2009) also suggested that future study investigates the influence of materialism towards purchase intention. This is supported by Ahmad et al. (2014) who also suggested that future studies should be conducted in order to examine the influence of materialism towards purchase intention of counterfeit products in countries other than China. Therefore, this study is conducted to fill the gap of contradictory results on the significance of materialism and also to find the gap where there is less research being conducted in other countries including Malaysia. As the respondents are only those with past experience, this study investigated on repurchase intention and not purchase intention. Thus, the following hypothesis is developed:

H5: There is a significant relationship between materialism and repurchase intentions of counterfeit product.

2.5. Social Factors

Budiman (2012) defined consumption status as the behavior of a consumer who constantly looks for self-satisfaction by performing status and prestige to society through actual evidence, such as by wearing and using expensive brand products. This factor influences the repurchase intentions of past purchasers as they are satisfied with the prestige and attention that they get by wearing expensive products as society does not know that the products are imitations. In line with the application of TPB, social pressure brought by others on an individual will affect his/her attitude and intention to repurchase counterfeit products as he/she believes that it helps to maintain a positive relationship with society (Fernandes, 2013). Further, Ong et al. (2013) and Hidayat and Diwasasri (2013) revealed that social status or social class also has been suggested as an important predictor of purchases of luxury products such as fashion designer brands.

The decision to purchase any item is usually influenced by the opinion of peers, family and perceived accepted behavior on consumption. Therefore, when the consumers are deciding whether to purchase or not, they may have the tendency to look at the social ideal and standards imposed by others toward them (Tang et al., 2014; Phau & Teah, 2009). On the other hand, social status or social class also has been suggested as an important predictor of purchases of luxury products such as fashion designer brands (Ong et al., 2013). Hidayat and Diwasasri (2013) also found that social factors had a positive effect to the
purchase intention due to the fact that the normative people in Indonesia, in their effort to impress others, will probably purchase counterfeit products, as they may not be able to buy the original ones. However, De Matos et al. (2007) revealed that the intention to impress others may not work by purchasing counterfeit products as the choice of counterfeits may negatively affect the impression and perception of others towards the purchasers. This is because people or society would not have the same value and impression if they knew that the person is wearing counterfeit products. As the studies on social factors were conducted mostly in China and Indonesia, this study is conducted to see the current situation in Malaysia on the influence of social factors towards the intention to repurchase counterfeit products. This study is also conducted to fill the gap of the contradiction in findings and view the result(s) in a Malaysian context. Hence, the next hypothesis is developed:

H6: There is a significant relationship between social factors and repurchase intention of counterfeit product.

2.6. Economic Benefits

According to Norum and Cuno (2011), the economic consequences of purchasing counterfeits such as lower price of the products, influence the repurchase intention in the future. Economic benefits refer to the advantages or profit earned by the individual as a result of purchasing counterfeit products. As counterfeits are sold at cheaper prices compared with the original, the purchasers believe that they earn a profit when they can save their money by buying cheaper items, rather than spending money to buy the expensive original. This is supported by Ahmad et al. (2014) that revealed the fact that price is the major factor that leads to strong intentions to purchase and repurchase counterfeit products as there is a large difference between the price of the original and counterfeit products.

Due to the economic benefit that the consumer gains from the price differences, this will lead to a positive attitude towards the counterfeit products. Consumers prefer to buy counterfeit products which are cheaper than the original and they think that they can gain economic benefits in terms of saving from that purchase (Poddar at al., 2012). Some consumers would repurchase the counterfeit if no one were likely to see that it was a fake, and at the same time, a cheaper price always makes the deal more attractive for the consumers (Ong et al., 2013). The researchers found that consumers prefer to buy counterfeit products which are cheaper than the original and they think that they can gain economic benefits in terms of saving from that purchase. This is due to the fact that some counterfeit products look exactly the same with the original and it is difficult to differentiate between them. Thus, the consumers feel that it is more beneficial to buy the cheaper counterfeit rather than the original that is more expensive.

However, Yoo and Lee (2009) found that attitude toward the economic benefits of counterfeits purchase does not affect purchase intentions. De Matos et al. (2007) also revealed that counterfeit products will not bring maximum monetary gain and economic benefits to the purchaser. This is due to the fact that the counterfeit products are cheaper, however it might not work as the original and there is no warranty being provided if anything happens to the products. This is also supported by Norizaton et al. (2012) who revealed that some of the consumers do not mind purchasing the expensive original products and ignore the economic benefits they can gain from counterfeits as they believe that the original is more reliable and of higher quality. In addition to that, the counterfeits may not be safe for usage and consumption as compared to the original one (De Matos et al., 2007) and therefore, the researchers suggested that future research should be undertaken to see the effects on the influence of economic benefits towards purchase intention, in view of the inconclusiveness of the literature. Thus, this study is conducted to fill the gap regarding the influence of economic benefits towards repurchase intention of counterfeit products. Therefore, it is hypothesized that:

H7: There is a significant relationship between economic benefits and repurchase intention of counterfeit products.
2.7. **Attitude**

Ahmad et al. (2014) defined attitude as a responsive situation to start the propensity in a good and bad way. It is viewed as the internal condition of an individual that he or she uses to develop behavior. Consumers around the world have diverse attitudes about their purchasing habits and thus, it is important to study on their attitude which will eventually give an impact to their intentions. According to Hidayat and Diwasasri (2013) attitude is a learned predisposition to take action and it is always used as the predictor of intention and behaviors of consumers. Most of the past researchers found that the attitude towards counterfeit products has strong impact on purchase intentions of consumers (Ahmad et al., 2014). Bestoon (2013) revealed that the attitude of the consumers towards counterfeit products will either positively or negatively affect their intention to purchase counterfeit products. This is supported by Muhammad (2012) who found that attitude has a significant impact on the purchase intention of counterfeit products and it can be influenced by so many factors including the product itself, the advertisement, influence from friends and relatives and other factors. Thus, this study is conducted to study the influence of past purchases, materialism, social factors and economic benefits of the attitudes of the consumer towards counterfeit products. This study also investigated the mediating effects of attitude towards the relationship between the factors and intention to repurchase, with the application of TPB. Hence, the following hypothesis is developed:

H₈: Attitude towards counterfeit products mediates the relationship between past purchases, materialism, social factors, economic benefits and repurchase intention.

### 3. Research methodology

The target population was the consumers, who were 18 years and above, and have had experience of purchasing counterfeit products. A five-point Likert scale ranging from “strongly disagree” (1) to “strongly agree” (5) was used to assess each statement in the questionnaire. However, for demographic factors, open-ended questions were used. The data collected from the questionnaire were then analyzed using Statistical Package for Social Sciences (SPSS). For the factor analysis, the guideline from Hair et al. (2010) are followed where the analysis was conducted to see on the Kaiser-Meyer-Olkin measure of sampling adequacy (KMO), Bartlett’s test of Sphericity, anti-image correlation matrix of items, communalities of the items, factor loadings, Eigen values, percentage of variance explained and there should be no cross loading. Factor analysis is utilized since most of the measurement items were adapted and modified from various sources, especially those dimensions of factors influencing buying intentions. Reliability analysis was then performed to determine whether a group of items consistently reflected the construct it is measuring and the most common measure of reliability is internal consistency of the scale (Hair et al., 2010). Cronbach’s alpha was calculated in order to examine the internal consistency of the factors obtained and the scales used in this study. In addition, multiple regression analysis was also used to predict the relationship between the five independent variables, mediator and dependent variable. The multiple regression analysis was used to test all the hypotheses postulated in this study. Pearson Correlation Coefficients are computed to examine the strength and the direction of the relationship between all the constructs in the study. Moreover, descriptive statistics were analyzed to understand the profile of respondents.

#### 3.1. Analysis and discussion

Fig. 1 shows the demographic profile of the respondents. A total of 200 respondents participated in this study. It was found that 92 percent of the respondents are young adults (18 to 20 years old) while the remaining are middle aged (31 to 58 years). The analysis of the respondents’ information reveals that more than half of the respondents were female (61 percent) and 76.5 percent of respondents in this study are single.
In terms of the products that they have purchased in the past, most of the respondents have purchased counterfeit luxury designer bags (26 percent), followed by counterfeit CDs and DVDs (25 percent), clothing (16 percent), counterfeit cosmetics products (13.5 percent), pharmaceuticals (9.5 percent), computer software (9 percent) and the least counterfeit automotive products (1 percent). This information is presented in Fig. 2 as follows.

3.2. Factor Analysis of Independent Variables

Table 1 denotes that the final run of factor analysis produced four factors with eigenvalues more than 1, which explained 70.81 percent of the total variance. The four items with eigenvalues more than 1 are...
considered significant and the four extracted components together explained 70.81 of the variances. Factor 1 has an eigenvalue of 2.751 and explained 26.66 percent of the total variances. Factor 2 has an eigenvalue of 2.751 and explained 21.16 of the total variances. Factor 3 captured 12.33 percent of the total variance with an eigenvalue of 1.603. Lastly, Factor 4 has an eigenvalue of 1.386 and captured 10.66 percent of the total variance. The Keyser-Meyer-Oklin value was .722 and the Bartlett test of sphericity was significant at 0.00. Anti-image correlation for the remaining 13 items of independent variables exceeded .50. The communalities of the 13 items ranged from .536 to .861. The factor loadings for the remaining independent variables were in the range of .646 to .896, which indicated above the recommended cutoff point value of 0.40 for practical and statistical significance. Overall, all the variables were loaded significantly on four factors as conceptualized, therefore the same label were used to label these factors.

Table 1
Factor Analysis of the Independent Variables

| Items                      | F1     | F2     | F3     | F4     |
|----------------------------|--------|--------|--------|--------|
| **MATERIALISM**            |        |        |        |        |
| People place too much emphasis on material things. | .821   |        |        |        |
| I would be happier if I could afford to buy more things. | .790   |        |        |        |
| It is important to me to have really nice things. | .765   |        |        |        |
| The things I own give me a great deal of pleasure. | .646   |        |        |        |
| **ECONOMIC BENEFITS**      |        |        |        |        |
| When purchasing a product, I always try to maximize the quality I get for the money I spend. | .917   |        |        |        |
| I am very concerned about low prices, but I am equally concerned about product quality. | .878   |        |        |        |
| I generally shop around for lower prices on products, but they still must meet certain quality requirements before I will buy them. | .830   |        |        |        |
| **PAST PURCHASES**        |        |        |        |        |
| I am keen to purchase counterfeit products again in the near future. | .896   |        |        |        |
| I don’t feel guilty after purchasing counterfeit products. | .857   |        |        |        |
| I have bought many counterfeit products in the past. | .768   |        |        |        |
| **SOCIAL FACTORS**        |        |        |        |        |
| A product is more valuable to me if it has “high status” appeal. | .831   |        |        |        |
| Luxury brands help me to fit into important social situations. | .806   |        |        |        |
| **Eigen values**           | 3.465  | 2.751  | 1.603  | 1.386  |
| **% of Variance**          | 26.66  | 21.16  | 12.33  | 10.66  |
| **Total Variance Explained** | 70.81  |        |        |        |
| **Measure of Sampling Adequacy** | .722   |        |        |        |
| **Bartlett’s test of Sphericity** | 1078.198 |        |        |        |
| **Significant**            | .00    |        |        |        |

3.3. Factor Analysis of Attitude

The factor analysis for the attitude variables with six items produced only one factor with eigenvalue of 4.059 and explained 67.64 percent of the total variance. The Keyser-Meyer-Oklin value was .851 and the Bartlett test of sphericity was significant at 0.00, indicating that the items were correlated and suitable for factor analysis. The communalities of the six variables ranged from .526 to .772 and factor loadings of the variables ranged from .725 to .879. Table 2 below shows the factor loadings of the items measuring the attitude.

Table 2
Factor analysis for the mediator (Attitude)

| No | Item                                                                 | Factor Loadings |
|----|----------------------------------------------------------------------|-----------------|
| 1  | Buying counterfeit products generally benefits the consumers.        | .879            |
| 2  | There is nothing wrong with purchasing counterfeit products.         | .863            |
| 3  | Generally speaking, buying counterfeit products is a better choice.  | .858            |
| 4  | Counterfeit products are as reliable as the original.               | .801            |
| 5  | Counterfeit products have similar quality as the original.          | .799            |
| 6  | Counterfeit products provided similar functions to the original.    | .725            |

3.4. Factor Analysis of Repurchase Intention

The factor analysis for the repurchase intention variables produced only one factor with eigenvalue of 3.814 and explained 76.285 percent of the total variance. The Keyser-Meyer-Oklin value was .863 and
the Bartlett test of sphericity was significant at 0.00, indicating that the items were correlated and suitable for factor analysis. The communalities of the five variables ranged from .713 to .781 and factor loadings of the variables ranged from .844 to .884. Table 3 below shows the factor loadings of the items measuring the attitude.

Table 3
Factor analysis for the dependent variable (Repurchase Intention)

| No | Item                                                                 | Factor Loadings |
|----|----------------------------------------------------------------------|-----------------|
| 1  | I have the intention to repurchase counterfeit products.              | .884            |
| 2  | My willingness to repurchase counterfeit products is high.           | .882            |
| 3  | I would repurchase counterfeit brand rather than the original.       | .878            |
| 4  | I am willing to recommend others to purchase counterfeit products.   | .878            |
| 5  | I repurchase counterfeit products without hesitation if I have a chance to repurchase them. | .844            |

Eigen Value = 3.814, Total Variance Explained = 76.285, Measure of Sampling Adequacy = .863, Bartlett’s test of Sphericity = 746.685(0.00)

3.5. Reliability analysis

The Cronbach’s alpha for the six dimensions (i.e. past purchases, materialism, social factors, economic benefits, attitude and repurchase intention) are presented on Table 4.

Table 4
Reliability Analysis on Variables of the Study

| Variables        | No. of Items | Cronbach’s Alpha |
|------------------|--------------|------------------|
| Past Purchases   | 3            | .82              |
| Materialism      | 4            | .77              |
| Social Factors   | 3            | .76              |
| Economic Benefits| 3            | .86              |
| Attitude         | 6            | .90              |
| Repurchase Intention | 5     | .92              |

All of the Cronbach’s alpha values revealed significantly over 0.7. The Cronbach’s alpha for the four dimensions of independent variables range from .76 to .86. The six items measuring attitude have a reliability coefficient of .90. Meanwhile, the five items used to measure repurchase intention produced an alpha coefficient of .92. These indicate that all the items left for the measurement of the variables are reliable with the Cronbach’s alpha values over 0.7

3.6. Hypotheses Testing

In view of the conceptualization of the model, multiple regression and hierarchical regression were conducted to test the hypotheses. Multiple regression analysis was used because there is more than one independent variable to explain variance in the dependent variable. This includes demographic factors, past purchases, materialism, social factors and economic benefits. The regression coefficient indicates the relative importance of each of independent variable in the prediction of dependent variable. The R square is the amount variance explained in the dependent variable predictors.

Table 5
Regression Analysis (Independent Variables to Dependent Variable)

| Dependent Variable | Independent Variable | Std. Coefficient Beta (β) | t     | Sig. |
|--------------------|----------------------|---------------------------|-------|------|
| Repurchase intention | Gender      | -.222                     | -3.241| .001 |
|                    | Age         | .049                      | .552  | .582 |
|                    | Monthly income| .148                      | .1655 | .099 |
|                    | Past purchases| .705                      | 14.004| .000 |
|                    | Materialism  | .168                      | 2.391 | .018 |
|                    | Social factors| .332                      | 4.949 | .000 |
|                    | Economic benefits| -.307                    | -4.541| .000 |

*Significant at the 0.05 level

R² = .564
Adjust R² = .548
F Value = 35.511
Sig. F = .000
From Table 5, $R^2$ is used to determine how well the regression line fits the data. The result shows, 56.5 percent of the variances in dependent variable are explained by the independent variables. On the other hand, adjusted $R^2$ is used to measure the goodness of fit by taking into account the degrees of freedom with 54.8 percent. The F value of 35.11 percent is used to examine the overall significance of independent variables. As can be seen from Table 5, age and monthly income are not significant with significant value of .582 and .099 respectively. Based on the result for Hypotheses 1, the result shows that there was a significant relationship between gender and repurchase intentions. This supported the research conducted by Norum and Cuno (2009) whereby the researchers found that gender was a significant predictor of intention to purchase counterfeit products. Based on the finding, the relationship provides a negative relationship which means that male consumers have a higher tendency to repurchase counterfeit products as compared with women. This is true for certain types of counterfeit products which includes counterfeit software, CDs and DVDs as well as automotive products. As the originals are more expensive, male consumers prefer to purchase the counterfeit products and they have the intention to repurchase again in the future. However, the result of this study shows that there is no significant relationship between age and repurchase intentions. These results supported a study that was conducted by Robinson and Doss (2011) who found that age did not appear to be a significant factor influencing intention to purchase counterfeit products. This is due to the fact that consumers of all ages still buy counterfeit products regardless of whether they are young adults or middle aged. If they are satisfied with the counterfeit product(s) that they have purchased in the past, they will have the intention to repurchase the product(s) again in the future. It is also revealed that there is no significant relationship between income and repurchase intentions and this contradicts the result of the studies conducted by Robinson and Doss (2011) and Prendergast et al. (2002) who found otherwise. Phau et al. (2009) revealed that most of the younger people who purchase counterfeits are those with lower incomes and less educated. However, a study conducted by Robinson and Doss (2011) concluded that people with a high income also bought and have the intention to purchase counterfeit products. Prendergast et al. (2002) supported that whereby the researchers found that there are consumers who can afford to buy the originals but still opt to buy counterfeit products. This shows that even though the consumers have high income, but they will still prefer to buy counterfeit products as they perceived that counterfeit product is more beneficial due to cheaper price of the product as compared to the original. In addition to that, income is not a significant predictor for repurchase intentions as the consumers will opt to buy counterfeit products regardless of their income level. This supported study conducted by Chaudhry and Stumpf (2011) who found that income has no significant relationship with the intention to purchase counterfeit products. Thus, from the findings of this study, $H_1$ is accepted, while $H_2$ and $H_3$ were rejected.

Based on the regression result, the relationship between past purchases and repurchase intention is found to be significant with $\beta=.705$ at .001 a significant level. Thus, Hypothesis 4 is accepted as it was found that there is a significant relationship between past purchases and repurchase intentions. The result supported the finding of other previous researchers including Yoo and lee (2012) and Robinson and Doss (2011) who found that the past purchases of counterfeit products significantly influenced the current and future purchases as the consumers have a higher probability to repurchase the products. This is because when the consumers have the experience of purchasing counterfeit products, they will create a mindset that there is nothing wrong with purchasing counterfeit products and they will have the intention to purchase again in the future. In addition to that, based on the finding, it was found that there is a significant relationship between past purchases and attitude towards counterfeit products. This is true as once the consumer purchased any counterfeit item in the past and they are satisfied with the product, they will have a positive attitude towards the products. They will feel that it is better for them to buy the cheaper counterfeit products which look the same as the original and sometimes it is harder to differentiate between the original and the counterfeit items.

Based on the regression result, the relationship between materialism and repurchase intention is found to be significant with $\beta=.128$ at .018 significant level. Based on the analysis, it was found that materialism
has significant effect on the repurchase intention of a counterfeit product. It is revealed that the materialism factor would definitely affect the repurchase intention in the future as the consumers have the desire to gain the luxury products, but they are too expensive. As a result, they go for the second option which is the counterfeit product in order to satisfy their wishes and desires to own. This finding supported the studies conducted by Furnham and Valgeirsson (2007) and Norum and Cuno (2009) who found that materialism or desire to own things has caused the consumers to do something unethical, for example, purchasing counterfeit products. The consumers do not mind if they are wearing a fake or counterfeit product, as long as other people do not notice that the product is not an original product.

Based on the regression results, the relationship between social factors and repurchase intention is found to be significant with β=.332 at .000 a significant level. From the result of the analysis, it is revealed that social factor has a significant relationship with repurchase intention and this is supported through the previous findings by Robinson and Doss (2011), Tang et al. (2014) and Prendergast et al. (2002). This is whereby the surroundings of the consumers including their friends and pressure to impress members of society affect their repurchase intentions of counterfeit products. The social factors are important as it makes the consumers believe that they are more acceptable in a society once they are wearing expensive goods. Thus, in order to help them socialize, they find other alternatives, buying counterfeit products, for example, luxury shoes, handbags and mobile phones. The research found that the purchase of counterfeit products is influenced by the social pressures to achieve a certain level of social status and acceptance by society. As the consumers want to be accepted in society, they do not mind purchasing counterfeit products as they believe this is the better alternative in order for them to look “stylish” and to be accepted by society.

For the final independent variable which is economic benefits, it was found that there is a significant relationship between economic benefits and repurchase intention. Based on the regression result, the relationship between economic benefits and repurchase intention is found to be significant with β=-.307 at .000 significant level. This supported the study which was conducted by Poddar et al. (2012) and Fernandes (2013). However, the relationship is a negative relationship whereby if the consumers are aware of the economic benefits, it will reduce their intention to repurchase counterfeit products. This is due to the fact that the economic benefits that are received by the consumers through purchasing the counterfeit products will not really bring any difference to them as the counterfeit products are of a different quality compared with the original and the reliability as well as the performance will not be the same as the original even though they look almost or exactly the same. Thus, some of the consumers believe that it is better for them to purchase the original that is more expensive but at higher quality in terms of material, reliability and performance. Therefore, as the consumers realize the economic benefits from the purchase of counterfeit products, it will reduce their repurchase intentions of the products in the future.

For the relationship between attitude and repurchase intention, the result is shown in Table 6. As mentioned earlier, R² is used to determine how well the regression line fits the data. From the result shown, 51.9 percent of the variances in dependent variables are explained by the independent variables. On the other hand, adjusted R² is used to measure the goodness of fit by taking into account the degrees of freedom with 51.7 percent. The F value of 213.665 percent is used to examine the overall significance of independent variables.

| Table 6 |
| --- |
| Regression Analysis (Mediator to Dependent Variable) |
| **Dependent Variable** | **Mediator** | **Std. Coefficient Beta** |
| Repurchase intention | Attitude | .720 |
| R² | .519 |
| Adjust R² | .517 |
| F Value | 213.665 |
| Sig. F | .000 |

** Significant at the 0.01 level  *Significant at the 0.05 level
It is found that attitude has a significant relationship with repurchase intentions, whereby it shows that if the consumer has a positive attitude towards a counterfeit product it will lead to an intention to repurchase the products again in the future. This can be related to the TPB theory as purchase intention is one of the good determinants of purchase behavior, whereby the purchase intention is in turn determined by the attitudes (Phau et al., 2009). The result supports the finding of studies conducted by Ahmad et al. (2014), Norum and Chuo (2011) and Yoo and Lee (2009) who also found that positive attitude towards counterfeit products will lead to the intention to repurchase in the future. It is also supported by the study conducted by Budiman (2012) who revealed that the stronger the attitude of a consumer towards counterfeit products, the stronger the intention to purchase the product.

3.7. Hierarchical Regression Analysis

Regression analysis was conducted to see the lower level confidence interval and upper level confidence interval in understanding the effect of attitude towards the relationship between independent variables and the dependent variable. Based on the findings in Table 7, it can be seen that for past purchases, the range of confidence interval is between .1721 and .3589. On the other hand, for materialism, the range of confidence interval is between .0746 and .2345. This shows that there is no zero in between for the confidence interval of past purchases and materialism. Therefore, attitude has a mediation effect on the relationship between past purchases and repurchase intention, as well as on the relationship between materialism and repurchase intention. Other independent variables (i.e. social factors and economic benefits) have zero in between the value of lower level confidence interval and upper level confidence interval, as shown in Table 7. Thus, attitude does not mediate the relationship between social factors and repurchase intentions, as well as the relationship between economic benefits and repurchase intentions.

Therefore, from the finding, it can be concluded that attitude towards counterfeit products mediates the relationship between past purchases, materialism, social factors, economic benefits and repurchase intentions.

| Table 7 |
|----------|
| Mediator  | Independent Variables | LLCI | ULCI | Result |
|----------|-----------------------|------|------|--------|
| Attitude | Past Purchases        | .1721| .3589| No zero in between |
|          | Materialism           | .0746| .2345| No zero in between |
|          | Social Factors        | -.0292| .0720| Zero in between |
|          | Economic Benefits     | -.1073| .0024| Zero in between |

Based on the analysis made, it was found those attitudes only mediated the relationship between past purchases and repurchase intentions, as well as materialism and repurchase intentions. This is because both past purchases and materialism will affect the attitude of the individual, as they have the experience of purchasing and they have the desire to own. Robinson and Doss (2011) revealed that the decision made by consumers is based on the evaluations of the alternatives and the selected alternative will be the one that satisfies the consumer’s needs. However, the findings show that attitude does not mediate the relationship between social factors and repurchase intentions, as well as economic benefits and repurchase intentions. Therefore, attitude only has partial mediation. This is because the social factors and economic benefits are unable to affect the attitude of the consumers as they know that the counterfeit products will not be able to make them stand out from others and even though they are cheaper, the quality will definitely not be the same compared to the original products.

4. Conclusion

Many studies in the past have revealed that various factors have influenced intentions to purchase counterfeit products. The factors on why customers purchase counterfeit products are widely known, based mostly on demand and supply. However, the contribution of this study is on the repurchase intention,
whereby this study investigated on repeat repurchases and the respondents selected in this study are amongst those who have the past experiences of purchasing counterfeit products. This is a different context as repurchase intentions will only exist if that buyer has the experience and knows how it felt to purchase counterfeit products. It is important to know the factors that influence intentions to repurchase counterfeit products. One of the serious concerns is that the consumer does not know that their action(s) can bring harm to the economies and they tend to purchase again and again. The outcome of this study can also be used as reference and knowledge for scholars in understanding the attitude of consumers and their repurchase intentions of counterfeit products, especially for those researchers who want to do further research on this in other settings, by using the same or different set of variables.

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