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A Critical Study on the Factors Influencing Consumers' Intention to Purchase Counterfeit Products in Penang, Malaysia

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ABSTRACT

Counterfeit products ("CP") are illegal selling of those imitations derived from the original versions. Typically, counterfeiting is a fraudulent practice by affixing counterfeit trademarks (Budiman 2012). Counterfeits are also labelled as imitation, fake, copycat and copy (Beth 2019). CP span across multiple industries and common products include apparels, footwear, watches or jewelry, handbags, consumer electronics, pharmaceuticals, optical media, computers and others (Dunham 2019).

E-commerce is rapidly growing and expected to surpass USD$4 trillion by 2020 (National Association of Manufacturers 2020) and is rapidly facilitating the sales of CPs. The Organisation for Economic Cooperation and Development (OECD 2019) reported that sales of CP reached a staggering USD$509 billion or 3.3% of global trade in 2016. According to Richter (2019), China and Hong Kong were the top global hubs for counterfeits from 2014 to 2016 period.

CP is also a challenging issue in Malaysia. CP's revenue is estimated at approximately RM300 billion per year or 21 percent of the Malaysia gross domestic product (GDP) (Malaysian Reserve 2020). In Malaysia, the Domestic Trade and Consumer Affairs Ministry's enforcement division collaborates with registered trademark owners to protect intellectual property rights including seizures of CPs. For example, in July 2020, the enforcement team seized counterfeit branded clothes worth approximately RM1.6 million at two premises in Selangor (Malay Mail 2020). The enforcement team also seized counterfeit perfumes worth RM1.7 million in Kuala Lumpur in December 2020 (Mohamad, 2019; Hani 2020). These counterfeiting activities adversely affected the business of producers of genuine items (The Star 2020).

Keywords
Purchase, Consumers, Counterfeit, Malaysia

INTRODUCTION

1.1 Background of Research

Counterfeit products ("CP") are illegal selling of those imitations derived from the original versions. Typically, counterfeiting is a fraudulent practice by affixing counterfeit trademarks (Budiman 2012). Counterfeits are also labelled as imitation, fake, copycat and copy (Beth 2019). CP span across multiple industries and common products include apparels, footwear, watches or jewelry, handbags, consumer electronics, pharmaceuticals, optical media, computers and others (Dunham 2019).

E-commerce is rapidly growing and expected to surpass USD$4 trillion by 2020 (National Association of Manufacturers 2020) and is rapidly facilitating the sales of CPs. The Organisation for Economic Cooperation and Development (OECD 2019) reported that sales of CP reached a staggering USD$509 billion or 3.3% of global trade in 2016. According to Richter (2019), China and Hong Kong were the top global hubs for counterfeits from 2014 to 2016 period.

CP is also a challenging issue in Malaysia. CP's revenue is estimated at approximately RM300 billion per year or 21 percent of the Malaysia gross domestic product (GDP) (Malaysian Reserve 2020). In Malaysia, the Domestic Trade and Consumer Affairs Ministry's enforcement division collaborates with registered trademark owners to protect intellectual property rights including seizures of CPs. For example, in July 2020, the enforcement team seized counterfeit branded clothes worth approximately RM1.6 million at two premises in Selangor (Malay Mail 2020). The

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1.2 Problem Statement

In line with the increasing global trends, counterfeit goods are flooding Southeast Asian region including Malaysia (Kang & Wong 2018). Kaushik (2019) stated that South East Asia plays a prominent role in counterfeit goods production and accountable for 5 percent to 40 percent of the counterfeits goods sold globally (Henderson 2019). Teo and Mohd Yusof (2017) also claimed that Malaysia, Thailand, Philippines, Cambodia, Laos, and Myanmar are ideal transit hubs for CP. In Malaysia, counterfeiting is commonly associated with branded items (Teo and Mohd Yusof 2017). The International Trademark Association (INTA) encouraged more researches on the trading of counterfeit goods in Malaysia to aid policy planning and enforcements (Wong & Faiz 2018). For instance, section 99 of Trademarks Act (2019) provides that 'any person who counterfeits a registered trademark without consent may subject to a fine up to RM1 million or imprisonment not more exceeding five years or both'. However, despite strict regulations and enforcements, demand for CP remains high (Malaysian Reserve 2020). Hence, in order to understand the issue, this paper explores those determinants motivating demands for CP.

The EU-Malaysia Chamber of Commerce and Industry (2019) stated that there is widespread availability of counterfeiting especially in big cities such as Penang and Kuala Lumpur. A recent report from the Malaysian Reserve (2020) indicated that Penang is one of the counterfeit hotspots in Malaysia. Undeniably, the counterfeit issue is rampant in Penang, as authority seized RM1.94 million worth of CP in 2019 and disposed of RM1.01 million worth of goods seized in 2020 (Lo 2020).

However, the results are mixed and contradictory pertaining to the relationship between the identified variables. There are studies showing social influence and price having significant relationship with consumers' perception towards CP (Haque, Rahman & Khatibi 2009; Haque, Tarofder & Rahman 2011; Basu, Basu & Lee 2015; Verma, Kumar & Yadav 2018). However, Raza et al. (2014), Adhikari and Biswakarma (2017) and Gani et al. (2019) have contradicting findings, of which low price was not a significant factor in influencing consumers' PI. Additionally, many previous researchers were focused on Kuala Lumpur or Selangor (Haque, Rahman & Khatibi 2010; Leong, Osman & Abu Bakar 2017; Quoquab et al. 2017; Teo & Mohd Yusof 2017) and there is a lack of study in Penang. Thus, this paper identifies the most influencing factors for counterfeit PI in Penang.

1.3 Research Questions

The research aims to identify the factors influencing the PI of CP among consumers in Penang. The research questions are:

RQ1: Is there a significant relationship between price and purchase intention towards counterfeit products?

RQ2: Is there a significant relationship between social influence and purchase intention towards counterfeit products?

RQ3: Is there a significant relationship between personality and purchase intention towards counterfeit products?

RQ4: Is there a significant relationship between ethical concern and purchase intention towards counterfeit products?

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1.4 Research Objectives

The research objectives for this study are:
RO1: To determine whether there is a significant relationship between price and purchase intention towards counterfeit products.
RO2: To determine whether there is a significant relationship between social influence and purchase intention towards counterfeit products.
RO3: To determine whether there is a significant relationship between personality and purchase intention towards counterfeit products.
RO4: To determine whether there is a significant relationship between ethical concern and purchase intention towards counterfeit products.

LITERATURE REVIEW

2.2 Dependent Variable

2.2.1 Purchase Intention

PI rationally predicts an individual's purchasing behavior (Fishbein & Ajzen 1977). Warshaw and Davis (1985) outlined PI as a decision to buy or not to buy certain goods or services present or future. Armstrong, Morwitz and Kumar (2000) found that PI is useful to predict future demands. Similarly, Morwitz, Steckel and Gupta (2007) argued that PI is useful for managerial decisions. Chi, Yeh and Tsai (2011) stated that the possibility of consumers in buying certain products could be measured by PI where the stronger the PI the higher the consumers' willingness to purchase.
Likewise, Raza et al. (2014) clarified that the likelihood to purchase increases if their PI is high. Accordingly, PI indicates that buyers benchmark their PI against their prior knowledge, availability of alternative products and external surroundings before making a purchase. PI is an accurate variable to predict consumers' demand for a product. Many marketers and sellers view PI as the most crucial part for sales as PI may change in contexts (Raza et al. 2014).
Generally, there are two types of patrons for CP. The first are 'victims', who unknowingly purchased CP. The second category are 'conscious' consumers who are aware of the counterfeits. Phau, Prendergast and Chuen (2001) stated that about one-third of the consumers belong to the second category. In another study, Bian and Moutinho (2009) highlighted that consumers who knowingly purchase CP are accountable for fueling the demands for CP (see also Teo and Mohd Yusof, 2017).
Prior researchers linked various factors with the PI towards CP. For example, Haque, Tarofder and Rahman (2011) concluded there is a significant positive relationship between consumers' perception towards piracy and other variables like pricing, personality, economy, and social influence (Basu, Basu & Lee, 2015; Verma, Kumar & Yadav, 2018; Ong, Chiang & Pung 2015). Evidently, PI is influenced by many factors but this research will examine only four variables, namely price, social influence, personality and ethical concern.

2.3 Independent Variables

2.3.1 Price

Price plays a decisive role in PI (Haque, Khatibi & Rahman 2009). Many willingly trade off product quality in favour of a lower price tag (Bian & Moutinho 2009, cited in Phau 2010). In fact, many consumers could not afford original products and counterfeits are alternatives for those consumers who cannot afford genuine brands (Yoo & Lee, 2005 as cited in Phau 2010, Raza et al. 2014). This is also consistent the research by Chiu and Leng (2016) (as cited in Gani

et al. 2019), where market demand for CP is mainly due price difference between original and CP products (see for example Haque, Rahman, & Khatibi 2009; Haque, Tarofder & Rahman 2011; Leong, Osman & Abu Bakar 2017; Verma, Kumar & Yadav 2018; Beth 2019).

2.3.2 Social Influence

Social influence pertains to the effects of social influence on consumer behavior (Haque, Khatibi & Rahman 2009). Ang et al. (2001) perceived social influence as how other individuals influence consumers' judgement and decision-making processes. Ong, Chiang & Pung (2015) stated that people tend to follow others as social pressure helps to maintain relationship or to avoid from being discriminated. Hamelin, Nwanko and El Hadouchi (2013) noted that interaction with family and peers are the key drivers in influencing consumers to purchase counterfeit fashion products (see also Ong, Chiang & Pung, 2015, Djuhardi & Kusumawati, 2017).

Meanwhile, Hanzaee and Jalalian (2012) suggested that friends and relatives as common influencers to the purchase of CP. Indeed, consumers purchasing CPs are usually a susceptible and vulnerable group easily influenced by social pressure (Haque, Tarofder & Rahman 2011; Djuhardi & Kusumawati 2017). Basu, Basu and Lee (2015) further elaborated that the desire to own branded products to acquire admirations could motivate people to purchase CP. Such individuals believe that possessing expensive products will help to maintain a positive relationship with society.

However, De Matos et al. (2007) as cited in Harun et al. (2020) conversely argued that purchasing CP may negatively affect the impression and perception of others towards the purchasers since people may have negative impressions on those purchasing CP. Peer pressure is another factor that can influence consumers to buy luxurious authentic product as well (Bearden, Netemeyer & Teel 1989, cited in Ong, Chiang & Pung 2015). As such, the society may have different impact on the PI of consumers depending on how they perceive it.

2.3.3 Personality

Personality is as an important factor in affecting consumer's purchase intention (Miniard & Cohen 1983, as cited in Phau, Sequeira & Dix 2009). Djuhardi & Kusumawati (2017) characterised personality as a consistent and persistent pattern of behaviors. It is unique and varied. Udo-Imeh (2015), (as cited in Leong, Osman & Abu Bakar 2017) argued that personality affects the interactions between people.

Distinct from social influence, personality influence is the interpersonal impact of individuals independent of other's opinion or expectations (Nordin 2009, as cited in Djuhardi & Kusumawati 2017). Haque, Tarofder and Rahman (2011) regarded personality as the attitudes of consumers towards counterfeits. Other than attitudes, personality includes elements such as tastes, preferences and values (Leong, Osman & Abu Bakar 2017). Djuhardi and Kusumawati (2017) added personal gratification is also determining personality factor. Some consumers value self-satisfaction more than product quality and this leads to positive effect on consumers' PI on piracy (Haque, Khatibi & Rahman 2009).

Furthermore, Babamiri et al. (2019) asserted that several studies proved that consumers' personality and characteristic is one of the most critical factors in their purchase behavior. Example, Djuhardi and Kusumawati (2017) discovered that personality factor has significant influence on PI towards counterfeit branded sneaker shoes. A study by Haque, Tarofder and Rahman (2011) showed that personality has a positive effect on consumer perception towards piracy.

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2.3.4 Ethical Concerns

Ethical concerns are moral principles that prevent people from performing immoral actions (Basu, Basu & Lee 2015). Quoquab et al. (2017) defined it as principals, moral rules or norms that influence the behavior of an individual in the purchase, selling and use of products or services (see Wilkes 1978, as cited in Quoquab et al. 2017). Hanzaee and Jalalian (2012) argued that it relates to the integrity of PI. The consumers who lower ethical considerations and feel less embarrassed when buying CP (Beth 2019). On the contrary, consumers who have strong ethical underpinning will not purchase CP (Basu, Basu & Lee 2015). However, Quoquab et al. (2017) argued that different people possess different levels of ethical concern and perceive CP purchases variedly. This study concluded that there is a significant negative relationship between ethical concern and consumers' PI of CP (Quoquab et al. 2017).

2.4 Fundamental Theories

The Theory of Reasoned Action ('TRA') measures an individual's attitude towards an act and explains the correlation between behavior and intentions (Fishbein & Ajzen 1975, as cited in Mushi & Noor 2016). The Theory of Planned Behavior ('TPB') added the element of perceived behavioral control to TRA, which consists of the predicators of attitude, subjective norms and social influence (Ajzen & Albarracin 2007). Gani et al. (2019) examined prior studies that implemented TPB examining factors customers purchase CP. The TPB is generally accepted among scholars as valid indicators of consumer behavior. Southey (2011) also underlined that both TRA and TPB are widely implemented to study a range of consumer behaviors. Basu, Basu and Lee (2015) are one of those studies, that implemented TRA as a meaningful tool for understanding consumer behavior and investigate those factors that influences the consumers' intention to purchase CP.

Pricing is an advantage to CP as consumers can enjoy almost similar features of a product at a much lower price (Haque, Khatibi & Rahman 2009). Under the TRA, an individual's behavior can be predicted by how one thinks others perceive them (Basu, Basu & Lee 2015). Other's beliefs regarding a particular product does influence certain individuals to follow and form a group think (Haque, Rahman & Khatibi 2009). Therefore, social influence is another determinant motivating factor to purchase CP (see also Haque, Rahman and Khatibi, 2009 and Leong, Osman & Abu Bakar 2017). Quoquab et al. (2017) in another study also stated that consumers who consider the ethical aspect may refrain themselves from unethical behaviors.

2.5 Gaps in the Literature

There are gaps in prior literatures in this area. Firstly, previous literatures produced mixed and contradictory results on the relationship between the identified variables. For instance, majority studies showed that social influence and pricing have significant relationship with consumers' perception towards CP (Haque, Rahman & Khatibi 2009; Haque, Tarofder & Rahman 2011; Basu, Basu & Lee 2015; Verma, Kumar & Yadav 2018). However, Raza et al. (2014) and Gani et al. (2019) reflected that low price is insignificant in influencing PI of consumers (see also Adhikari & Biswakarma 2017). Conversely, Haque, Rahman and Khatibi (2010) concluded that consumer moralities and moral judgement were significant in terms of influencing consumer ethical decision on purchasing pirated software. Beth (2019) identified integrity, personal gratification and perceived risk have no influence on consumers' attitude towards CP. Likewise, Quoquab et al. (2017) indicated ethical concern has a significant negative in relation to consumers' PI of CP but Lysonski and Darsaula (2008) concluded some consumers do not find

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buying CP is unethical. As such, this research fill the gap of the contradiction in previous findings.

Secondly, previous research investigating the factors influencing PI of CP in Malaysia are obsolete (2009 – 2017). Moreover, consumers' behavior are evolving constantly (Raza et al. 2014). Znideric et al. (2013) argued that economic crisis altered consumers' value systems, attitudes, intentions, and ethical behavior significantly.

Thirdly, such research on Penang is scarce and hence this paper provides insights into those significant factors influencing consumers' PI of CP in Penang. It is interesting to examine if consumers in Penang differ from other countries or other states in Malaysia. For example, Basu, Basu and Lee (2015) pointed out the difference between India and the U.S., whereby consumers in India were more price-conscious and more open to CP than the U.S.

2.6 Research Framework

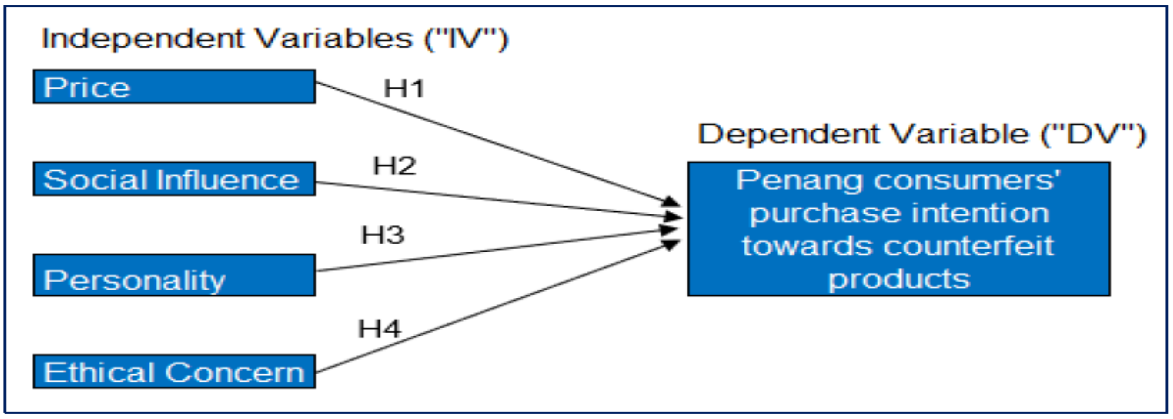

Figure 1.1 Research Framework

2.7 Hypotheses Development

2.7.1 Price and PI towards CP

H1: There is a significant relationship between price and PI towards CP.

A study by Haque, Khatibi and Rahman (2009) indicated that price positively influences Malaysian consumers' PI on CP especially new users who are not selective on product quality (see also Haque, Tarofder & Rahman 2011). Interestingly, other researches show that price does not significantly affect the PI of counterfeit mobile phones in Pakistan (see Raza et al. 2014). This was also supported by Gani et al. (2019), who reported that price does not affect the Bangladeshi consumers' purchase decision for CP in a significant way. However, other studies showed that lower income and education consumers in Brazil and the U.S. are more price sensitive and interested in counterfeiting (Stumpf et al. 2011, cited in Raza et al. 2014).

2.7.2 Social Influence and PI towards CP

H2: There is a significant relationship between social influence and PI towards CP.

Haque, Khatibi and Rahman (2009) and Haque, Tarofder and Rahman (2011) revealed there is a significant effect of social influence on consumers' perception on piracy in Malaysia. Studies by Ang et al. (2001) and Ong, Chiang and Pung (2015), similarly exposed that social influence significantly affect consumers' PI of counterfeit fashion apparels. They further elaborated that majority respondents are easily influenced by friends, family, and colleagues. Additionally, several studies in other countries (see Basu, Basu & Lee 2015; Djuhardi & Kusumawati 2017;

Abdullah & Yu 2019) indicated society influence was one of the main factors that influence consumers' decision to purchase counterfeits.

2.7.3 Personality and PI towards CP

H3: There is a significant relationship between personality and PI towards CP.

Several research demonstrated that personality plays significant influence on consumers' perception towards piracy (Haque, Khatibi & Rahman 2009; Haque, Tarofder & Rahman 2011; Djuhardi & Kusumawati 2017). Likewise, Babamiri et al. (2019) found that personality affects a person's attitude toward CP purchasing. However, Phau, Sequeira and Dix (2009) discovered that consumers' willingness to acquire counterfeit luxury brands is unaffected by personalities. Haque, Rahman and Khatibi (2009) concluded that personality has insignificant impact on consumers' perception on piracy.

2.7.4 Ethical Concern and PI towards CP

H4: There is a significant relationship between ethical concern and PI towards CP.

Based on a survey targeting 398 university students in Iran, Hanzaee and Jalalian (2012) concluded that ethics positively influence PI. Basu, Basu and Lee (2015) stated that ethics has a negative influence on the purchase of CP and the survey showed those who have ethical concerns do not buy counterfeits (see also Quoquab et al. (2017). However, Lysonski and Darvasula (2008) who studied respondents in the United States, discovered some consumers do not perceive buying CP unethical.

RESEARCH METHOD

3.2 Research Design and Research Paradigm

Research paradigm is defined as a philosophical way of thinking (Kuhn 1962, cited in Kivunja & Kuyini 2017). Guba and Lincoln (1994) explained (cited in Kivunja & Kuyini 2017) paradigms being a basic set of beliefs, providing guidance of research action to researchers.

The research paradigm for this paper is positivism. Kivunja and Kuyini (2017) highlighted positivism is based on deductive logic, formulation and testing of hypotheses, calculations, and extrapolations to draw conclusions (Saunders, Lewis & Thornhill 2019).

3.3 Sampling Design

3.3.1 Population and Unit Analysis

Sekaran and Bougie (2016) defined population as the entire group of individuals or things that researcher infers and investigates.

3.3.2 Sample Size and Sampling Technique

A sample is a subset of a larger population and the researcher can infer by generalising the population (Zikmund et al. 2010). Roscoe (1975) (as cited in Sekaran & Bougie 2016) recommended that an appropriate sample size for research should be between thirty to five hundred respondents. Boomsma and Hoogland (2001) proposed the minimum sample size of two hundred is generally safer whereas Hair et al. (2014) propounded that 100 samples are acceptable. Therefore, 150 samples will be collected for this research.

Sekaran and Bougie (2016) listed the main types of sampling design are probability and nonprobability sampling. To collect the data conveniently, a nonprobability sampling is deployed for this research. The technique selected is convenience sampling, which the data is collected from population that is conveniently accessible (Majid 2018). Such technique is typically applied for collecting a huge number of completed surveys in a short period of time (Raza et al. 2014).

3.4 Data Collection Methodology

Data were collected via online questionnaires through social media applications, such as WhatsApp, Messenger, emails etc.

3.5 Questionnaire Validity and Reliability

In this paper, factor analysis is applied. Kaiser-Meyer-Oikin (KMO) and Bartlett's test of sphericity (BTS) is deployed to examine the Measure of Sampling Adequacy (MSA). KMO is to verify the sampling adequacy. KMO statistics can vary between 0 and 1 (Vogt & Johnson 2011). The sampling is considered feasible if the value of KMO is above 0.5 (Field 2000; Setiawan 2020). According to Pallant (2013), the sampling is sufficient if the KMO value is 0.6 and above. Kaiser (1974) cited in Hadi, Abdullah & Sentosa (2016) interpreted the value of KMO.

3.6 Reliability Analysis

Reliability indicates the stability and consistency with which the instrument measures the concept (Sekaran & Bougie 2016). Coefficient alpha is frequently used to measure the multiple-item scale's reliability. The higher of coefficient alpha, the higher the reliability of the measurement and the range between 0.70 and 0.80 are deemed as good reliability (Zikmund et al. 2010).

3.7 Data Analysis Methodology

3.7.1 Descriptive Analysis

Zikmund et al. (2010) mentioned that descriptive analysis is the fundamental transformation of data to describe characteristics, such as central tendency, distribution, and variability. In this paper, the mean and standard deviation are deployed to analyse data collected from questionnaires. Based on a Five-point Likert Scale, mean score below 3.39 is considered low perception, mean score falls between 3.40-3.79 is considered moderate and it is considered high if more than 3.80 (Lope Pihie 2009)

3.7.2 Inferential Analysis

Inferential statistics generalise findings from a population sample (Allua & Thompson 2019). It establishes relationship among variables and draw conclusions. This paper deploys the Pearson's Correlation Coefficient and Multiple Regression Analysis models.

3.7.3 Pearson's Correlation

Pearson's Correlation Coefficient is deployed to measure the statistical significance of the relationship, the magnitude and direction of the relationship (Allua & Thompson 2019; Sekaran & Bougie 2016). It identifies the relationship between the IVs with the DVs, i.e. Penang consumers' PI towards CP. In the study by Schober, Boer and Schwarte (2018), the correlation coefficient ranges from -1.0 (negative correlation) to +1.0 (positive correlation).

3.7.4 Multiple Regression

Multiple regression is adopted for this paper and it is widely used in business research to examine the degree and character of relationship between the IVs and the DVs (Sekaran & Bougie 2016, Allua & Thompson 2019). This paper examines the proportion of variance in the DVs (consumers' PI of CP) by jointly regressing the four IVs (Price, Social Influence, Personality, Ethical Concern) against it. The value of coefficient of determination is represented by the square of multiple r, or R2 (Dhakal 2018). Generally, the value of R2 indicates how good a regression model fits a data set. Frost (2017) added that the value of R2 is not always an issue if it is small and high R2 does not mean it is good as well. It depends on the subject area being studied. For example, a subject like human behavior which is difficult to predict, it is unlikely to get a high value of R2.

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The results of the preliminary factor analysis and reliable test are discussed in the following sections.

FINDINGS AND DATA ANALYSIS FOR ACTUAL TEST

The questionnaire was distributed to consumers in Penang via social media applications, such as WhatsApp, Messenger, and emails. A total number of 150 respondents responded and this has achieved the target of 150 samples as required. Based on the result of factor analysis, the factor loading of SI2 variable fell under different component. Hair et al. (2014) stated that it is necessary to have factor loadings value in the range of 0.30 to 0.40 for interpretation of structure. Hence, this item is deleted, and factor analysis is re-tested. Subsequently, the factor loadings in a simple structure pattern with four components are achieved. Factor analysis and reliability test shown in the following sections are after the removal of SI2.

4.1.1 Factor Analysis

It is clear that KMO for DVs and IVs are above 0.8, which is above the acceptable value of 0.5 (Field 2000; Gani et al. 2019; Setiawan 2020). The Bartlett's test of sphericity (BTS) also shows as highly significant as the result of p=0.000. Therefore, the sampling is adequate.

Additionally, the Kaiser rule indicated factors with eigenvalue below 1.0 need to be removed (Samuels 2017). Since the eigenvalue for PICP is 3.623, the Kaiser's criterion has met. The eigenvalue levelling off at the second point explains that the single component is valid for this research.

Conversely, the four independent variables also record the eigenvalues of greater than 1.0 (PR=5.057, SI=2.461, PE=1.364, EC=1.032). Therefore, the four factors are qualified to be retained as it satisfies the Kaiser's criterion (Samuels 2017). As a result, the four components prior to the fifth point are retained.

4.1.2 Reliability Analysis

The Cronbach's Alpha values are greater than 0.6, which represent at least a fair reliability. The dependent variable, PICP records a very good reliability with an alpha value of 0.904. The two independent variables of PR and PE depict a good reliability as they are within the range of 0.70 to 0.80. Another independent variable of EC is also considered good reliability since the Cronbach's Alpha value is 0.832 and SI variable shows as fair reliability with an alpha value of 0.679. As such, these factors are kept for further analysis in the subsequent sections.

4.2 Descriptive Analysis

A 5-point Likert scale is applied to measure the degree of agreement. The mean value of PICP is 2.348, indicating a lower-than-average intention to purchase CP among the respondents. The means of SI and PE are 2.469 and 2.598 respectively, signifying the respondents generally rate themselves as less socially influenced by others in decision making and have relatively lower attitude or preference towards CP. The mean of PR is 3.403, demonstrating that the respondents tend to agree that price is a concern. The mean of EC is 3.978, showing that the respondents have higher ethical concern.

4.3 Results of Inferential Analyses and Hypotheses Testing

4.3.1 Result of Pearson's Correlation Analysis

The result of Pearson's Correlation Analysis is demonstrated here where, the independent variables, PR, SI, PE, and EC had p=0.000 ($p<0.05$) and this means the four independent

variables have statistically significant correlation respectively towards the dependent variable of PICP. Based on the interpretation given by Schober, Boer and Schwarte (2018), the Pearson's *r*-value of PR (0.530) and EC (-0.417) demonstrate moderate correlation with PICP. There is a strong and positive correlation between PE and PICP with *r*=0.723. However, SI displays a weak correlation with PICP as *r*=0.328.

4.3.2 Result of Multiple Regression Analysis

Before conducting a multiple regression analysis, multicollinearity test is performed to determine how well one variable can be explained by the other variables in the analysis. It is usually used to describe the relationship between three or more independent variables (Hair et al. 2014). Tolerance and Variance inflation factor ("VIF") are applied to measure the multicollinearity and the acceptable levels are tolerance value more than 0.10 and VIF not greater than 10 (Sekaran and Bougie 2016). The results of collinearity statistics after the removal of outliers. It is clearly that the tolerance values for all independent variables are greater than 0.10 and VIF values are less than 10. As such, there is no indication of multicollinearity.

The P-P Plot of Regression Standardised Residual reveals that the residual points linearly from bottom left to top right. No major deviation is observed from the plot. Hence, this is a normal distribution of the residuals. Additionally, the scatterplot of standardised residuals reveals the assumption of outliers, linearity, and homoscedasticity. There are two outliers deleted since the standardised residual values are more than 3.3 or less than -3.3. After the deletion of the two outliers, the Scatterplot of ZRESID vs ZPRED. It is observed that the residuals are evenly distributed without any patterns of non-normality, non-linearity, or heteroscedasticity. Thus, there is no violation of assumptions of homoscedasticity, linearity, independence, and normality.

It is observed that the R value stood at 0.795, which means the correlation between the independent variables and dependent variable is strong. The R square value of 0.631 denoted that 63.1% of the changes in PI of CP can be explained by the independent variables of PR, SI, PE, and EC. The remaining 36.9% of changes in PICP can be explained by the variation of other factors (Hair et al. 2014). In short, the independent variables are accounted to slightly more than 50.0% of the variation in PICP.

The result of ANOVA proves that there is a significant relationship between the independent variables and dependent variable as the p value is <0.05. Hence, one or more independent variables are significant to the dependent variable (Sekaran & Bougie 2016).

4.3.3 Hypotheses Testing

The hypotheses are tested by multiple regression analysis. Multiple regression analysis is applied due to there is more than one independent variable to explain changes in the dependent variable (Harun et al. 2020).

Hypothesis (H1): There is a significant relationship between price and PI towards CP.

Accordingly Price ("PR") has a β of 0.231 and p-value of 0.000, which is $p < 0.05$. This implies that there is a significant positive relationship between PR and PI towards CP in Penang. Thus, Hypothesis 1 is accepted.

Hypothesis (H2): There is a significant relationship between social influence and PI towards CP.

The result reveal that the relationship between Social Influence ("SI") and PI towards CP in Penang is insignificant with $\beta = 0.048$ and p-value = 0.404, which is $p > 0.05$. So, Hypothesis 2 is rejected.

Hypothesis (H3): There is a significant relationship between personality and PI towards CP.

It is validated that there is a significant positive relationship between Personality ("PE") and PI towards CP in Penang since the $\beta = 0.526$ and p-value = 0.000, which is $p < 0.05$. Hence, Hypothesis 3 is accepted.

Hypothesis (H4): There is a significant relationship between ethical concern and PI towards CP.

It is demonstrated that Ethical Concern ("EC") has a β of -0.187 and p-value of 0.001, which is $p < 0.05$. This indicates the relationship between EC and PI towards CP in Penang is significant and negative. Thus, Hypothesis 4 is accepted.

It is observed that out of four variables, only one variable, which is Social Influence, has no significant relationship with PI towards CP in Penang. The variables of Price and Personality have a significant and positive relationship with PI towards CP in Penang, whereas Ethical Concern has a significant and negative relationship with the dependent variable.

4.4 Key Findings

Clearly, some independent variables and dependent variable have a significant relationship. Price concern is one of the significant factors positively influencing consumers' PI towards CP. This finding suggests that consumers are willing to pay lesser price and search for cheaper price products, consequently, help in increasing the demands for CP. This finding supports the previous studies carried out by Haque, Rahman and Khatibi (2009), Haque, Tarofder and Rahman (2011), Leong, Osman and Abu Bakar (2017) and Verma, Kumar and Yadav (2018), who concluded that price is significant in influencing PI of consumers towards CP. Nevertheless, the research conducted by Raza et al. (2014) and Gani et al. (2019) demonstrated pricing has no significant influence on PICP. That means consumers are looking for something else other than low price. The different finding could be due to different samples as their surveys are out of Malaysia. As highlighted by Basu, Basu and Lee (2015), findings of every study depend on social and cultural settings. As for Penang context, price concern has a significant positive influence on consumers' PI towards CP.

Pertaining to social influence, this factor is proven as insignificant in influencing the PI of CP. This finding is inconsistent with the findings by Haque, Tarofder and Rahman (2011), Basu, Basu and Lee (2015), Ong, Chiang and Pung (2015), Djuhardi and Kusumawati (2017) and Abdullah and Yu (2019), which showed social influence has a significant relationship with PICP. Ong, Chiang and Pung (2015) added consumers are not able to resist influence by peers when purchasing counterfeit luxury items. However, Adhikari and Biswakarma (2017) found that the relationship between social influence and PI towards counterfeit apparels and accessories is less significant. This is because consumers buy CP not from the suggestion of others but from their own desire. Similarly, the respondents in this research depict that their PI towards CP is influenced by other factors instead of motivation from their friends or families. To sum it up, social influence does not have a significant influence on Penang consumers' PI towards CP.

The hypothesis for personality turned out to be having a significant positive relationship with PI of CP. This implies the respondents have a higher tendency to purchase CP, which can provide them a sense of self-satisfaction. The positive sign signals that the higher the personality factor the higher PI. Supporting the finding, the studies conducted by Haque, Tarofder and Rahman (2011) and Djuhardi and Kusumawati (2017) concluded that personality factor has a significant positive influence on PI towards CP. However, this is opposed to the finding presented by Haque,

Rahman and Khatibi (2009), who mentioned personality has no significant relationship with consumers' PI towards piracy products.

Besides that, the research found that the consumers' PI towards CP can be influenced by ethical concern. The negative value of $\beta = -0.187$ implies that consumers who have a higher score on ethics scale are less likely to have an intention to acquire CP. The Penang consumers, at the core, realise that acquiring CP is illegal and unethical. They know that supporting CP is considered irresponsible to the original industry. The finding of the current research is found to be consistent with the past studies done by Haque, Rahman and Khatibi (2010) and Quoquab et al. (2017) who examined the market in Malaysia. They concluded that ethical concern has a significant relationship with consumers' intention to purchase CP.

CONCLUSION

Counterfeiting is a significant issue that posing a threat to the global economy and consumers play a crucial role in counterfeit trade. The primary objective of the research is to identify the factors influencing the PI towards CP among consumers in Penang. As a result, the survey depicts that 86.7% of the respondents having experience in purchasing CP. Further, it proves that 63.1% of the variances in the dependent variable can be explained by the research model. Therefore, the research findings have met the objective by shedding some light on PI towards CP in Penang context.

The findings of the research indicates that price, personality, and ethical concern have a significant relationship with the consumers' PI towards CP. Personality is the most significant factor as compared to price and ethical concern. On the contrary, the relationship between social influence and PICP is found to be insignificant. These findings provide useful information and insights to users from a variety of fields, especially brand marketers. They can gain a deeper understanding of the consumers' needs and desires, hence able to better strategise their marketing efforts. In a nutshell, counterfeiting can never be completely eradicated, but it can be reduced if government, relevant industry players and consumers work together to tackle the issue.

REFERENCES

[1] Abdullah, QA and Yu, J 2019, 'Attitudes and purchase intention towards counterfeiting luxurious fashion products among Yemeni students in China', *American Journal of Economics*, vol. 9, no. 2, pp. 53-64.

[2] Adhikari, HP and Biswakarma, G 2017, 'Determinants of purchase intention towards counterfeit apparels in Nepalese consumers', *International Journal of Research in Business Studies and Management*, vol. 4, no. 10, pp. 10-17.

[3] Ajzen, I and Albarracin, D 2007, Predicting and changing behavior: A reasoned action approach, *Lawrence Erlbaum Associates*, New Jersey, viewed on 7 January 2021, < https://www.researchgate.net/publication/261796733_Predicting_and_changing_behavior_A_reasoned_action_approach>.

[4] Allua, S and Thompson, CB 2019, 'Inferential Statistics', *Air Medical Journal*, vol. 28, no. 4, pp. 168-171.

[5] Ang, SH, Cheng, PS, Lim, EAC and Tambyah, SK 2001, "Spot the difference: Consumer responses towards counterfeit', *Journal of Consumer Marketing*, vol. 18, no. 3, pp. 219-235.

[6] Armstrong, JS, Morwitz, VG and Kumar, V 2000, 'Sales forecasts for existing consumer products and services: Do purchase intentions contribute to accuracy?', *International*

Journal of Forecasting, vol. 16, no.3, pp. 383-397, viewed 1 October 2020, <https://repository.upenn.edu/cgi/viewcontent.cgi?article=1185&context=marketing_papers>.

[7] Babamiri, M, Moghadam, RH, Saidnia, H and Zemestani, M 2019, 'Relationship between personality characteristics and attitude toward purchase of counterfeit goods in the Iranian population', *Cogent Psychology*, vol. 7, no.1, viewed 2 November 2020, < https://www.tandfonline.com/doi/full/10.1080/23311908.2020.1779000>.

[8] Basu, MM, Basu, S and Lee, JK 2015, 'Factors influencing consumer's intention to buy counterfeit products', *Global Journal of Management and Business Research*, vol. 15, no. 6, pp. 51-65.

[9] Beth, WM 2019, 'Effects of personality factors on consumer attitude toward the acquisitions of CP', *African Multidisciplinary Journal of Research*, vol. 4, no. 2, pp. 1-23.

[10] Bian, X and Moutinho, L 2009, 'An investigation of determinants of counterfeit purchase consideration', *Journal of Business Research*, vol. 62, no. 3, pp. 368-378.

[11] 'Black market a drag on Malaysia's economy' 2020, *The Malaysian Reserve*, 2 July, viewed 20 January 2021, < https://themalaysianreserve.com/2020/07/02/black-market-a-drag-on-malaysias-economy/>.

[12] Boomsma, A and Hoogland, JJ 2001, 'The robustness of LISREL modeling revisited', *Scientific Software International*, viewed 11 November 2020, < https://www.researchgate.net/publication/237462497_The_robustness_of_LISREL_modeling_revisited_In_R_Cudeck_S_du_Toit_D_Sorbom_Eds_Structural_equation_modeling_Present_and_future_A_Festschrift_in_honor_of_Karl_Joreskog_preliminary_version_with_referenc>.

[13] Budiman, S 2012, 'Analysis of consumer attitudes to purchase intentions of counterfeiting bag product in Indonesia', *International Journal of Management, Economics and Social Sciences*, viewed 31 October 2020, <https://www. econstor.eu/ bitstream/10419 /62013/1/72371 3170.pdf>.

[14] Chi, H, Yeh, HR and Tsai, YC 2011, 'The influences of perceived value on consumer purchase intention: The moderating effect of advertising endorser', *Journal of International Management Studies*, vol. 6, no. 1, viewed 10 October 2020, <http://203.72.2.146/handle/987654321/27162?mode=simple&submit_simple=Show+simple+item+record>.

[15] Dhakal, CP 2018, 'Interpreting the basic outputs (SPSS) of multiple linear regression', *International Journal of Science and Research*, vol. 8, no. 6, pp. 1448-1452.

[16] Djuhardi, SA and Kusumawati, A 2017, 'The influencing factors on consumer's attitude towards counterfeit branded sneaker shoes and their impact to purchase intention', Journal of Administrasi Bisnis, vol. 50, no. 4, pp. 86-95.

[17] Dunham, N 2019, 'The 10 most common types of counterfeit products', *MoneyTalksNews*, viewed 1 November 2020, < https://www.moneytalksnews.com/the-10-most-counterfeited-products-and-how-to-spot-them/>.

[18] EU-Malaysia Chamber of Commerce and Industry 2019, *'EU-Malaysia Business'*, viewed 2 November 2020, <https://businessmalaysia.eu/admin/js/fileman/Uploads/EUMCCI%20Reports/EUMCCI_Trade_Booklet_2019.pdf>.

[19] Field, A 2000, *Discovering Statistics using SPSS for Windows*, London – Thousand Oaks – New Delhi: Sage Publications.

[20] Fishbein, M and Ajzen, I 1977, *Belief, Attitude, Intention, and Behavior: An Introduction to Theory and Research,* viewed 1 October 2020, < https://people.umass.edu/ aizen/f&a1975.html>.
[21] Frost, J 2017, How to interpret R-squared in regression analysis, viewed 1 February 2021, < https://statisticsbyjim.com/regression/interpret-r-squared-regression/>.
[22] Gani, MO, Alam, MI, Al-Islam, M, Chowdhury, SA and Faruq, MO 2019, 'Factors affecting consumers' purchase intention for counterfeit luxury goods in Bangladesh', Innovative Marketing, vol. 15, no. 4, pp. 27-41.
[23] Hadi, NU, Abdullah, N and Sentosa, I 2016, 'An easy approach to exploratory factor analysis: Marketing perspective', *Journal of Educational and Social Research,* vol. 6, no. 1, pp. 215-223.
[24] Hair JR, J. F., Black, W. C., Babin, B. J. and Anderson, R. E. (2014) Multivariate Data Analysis. 7th Edn. Pearson.
[25] Hamelin, N, Nwankwo, S and El Hadouchi, R 2013, "Faking brands: Consumer responses to counterfeiting', *Journal of Consumer Behavior,* vol. 12, no. 3, pp. 59-170.
[26] Hani, A 2020, 'KPDNHEP seizes 33,272 counterfeit perfumes worth RM1.7 mil', *The Malaysian Reserve,* viewed 10 March 2021, <https://themalaysianreserve.com/ 2020/12/12/kpdnhep-seizes-33272-counterfeit-perfumes-worth-rm1-7-mil/>.
[27] Hanzee, KH and Jalalian, S 2012, 'Impact of non-price factors on purchase intention counterfeits', *Research Journal of Applied Sciences, Engineering and Technology*, vol. 4, no. 18, pp. 3313-3322.
[28] Haque, A, Khatibi, A and Rahman, S 2009, 'Factors influencing buying behavior of piracy products and its impact to Malaysian market', *International Review of Business Research Papers,* vol. 5, no. 2, pp. 384-401.
[29] Haque, A, Rahman, S and Khatibi, A 2010, 'Factors influencing consumer ethical decision making of purchasing pirated software: Structural equation modelling on Malaysian consumer', *Journal of International Business Ethics,* vol. 3, no.1, pp. 30-40.
[30] Haque, A, Tarofder, AK and Rahman, S 2011, 'Exploring critical factors choice of piracy products: An empirical investigation on Malaysian customers', *European Journal of Economics, Finance and Administrative Sciences,* vol. 30, pp. 84-94.
[31] Harun, A, Mahmud, M, Othman, B, Ali, R and Ismael, D 2020, 'Understanding experienced consumers towards repeat purchase of counterfeit products: The mediating effect of attitude', *Management Science Letters,* vol. 10, pp. 13-28.
[32] Henderson, J 2019, 'HP seizes $7M worth of counterfeit products in Southeast Asia', *Channel Asia,* viewed 20 November 2020, < https://www.channelasia. tech/article/664084/hp-seizes-7m-worth-counterfeit-products-southeast-asia/>.
[33] Kang, SL and Wong, EL 2018, 'Sale of fake goods hits alarming level', *The Edge Financial Daily,* viewed 2 November 2020, < https://www.theedgemarkets.com/article/sale-fake-goods-hits-alarming-level>.
[34] Kaushik, P 2019, 'How blockchain can help combat the menace of counterfeit goods', *ASEAN Today,* viewed 20 November 2020, < https://www.aseantoday.com/2019/06/how-blockchain-can-help-combat-the-menace-of-counterfeit-goods/>.
[35] Kivunja, C and Kuyini, AB 2017, 'Understanding and applying research paradigms in educational contexts', *International Journal of Higher Education,* vol. 6, no. 5, pp. 26-41.
[36] Leong, MK, Osman, S and Abu Bakar, NS 2017, 'Relationship of personality factors and purchase intention of counterfeit products among college students', *Malaysian Journal of Consumer and Family Economics,* vol. 20, no. 2, pp. 106-121.

[37] Lo, TC 2020, 'Counterfeit products worth over RM1mil destroyed so far this year in Penang', *The Star*, viewed 11 November 2020, < https://www.thestar.com.my/news/nation/2020/10/16/counterfeit-products-worth-over-rm1mil-destroyed-so-far-this-year-in-penang>.

[38] Lope Pihie, ZA 2009, 'Entrepreneurship as a career choice: An analysis of entrepreneurial self-efficacy and intention of university students', European Journal of Social Sciences, vol. 9, no. 2, pp 338-349.

[39] Lysonski, S and Durvasula, S 2008, 'Digital piracy of MP3s: Consumer and ethical predispositions', *Journal of Consumer Marketing*, vol. 25, no. 3, pp. 167-178.

[40] Majid, U 2018, 'Research fundamentals: Study design, population and sample size', *Undergraduate Research in Natural and Clinical Science and Technology Journal*, vol. 2, no. 1, viewed 11 November 2020, < https://urncst.com/index.php/urncst/article/view/16>.

[41] Malay Mail 2020, '*Domestic Trade Ministry: Fake branded clothes worth more than RM1.6m seized in Batu Caves*', viewed on 1 March 2021, < https://www.malaymail.com/news/malaysia/2020/07/07/domestic-trade-ministry-fake-branded-clothes-worth-more-than-rm1.6m-seized/1882410>.

[42] Mohamad, N. I. 2019, 'RM500,000 in fake cosmetic products seized in Penang', *New Straits Times*, viewed 10 March 2021, <https://www.nst.com.my/news/crime-courts/2019/04/478545/rm500000-fake-cosmetic-products-seized-penang-nsttv>.

[43] Morwitz, VG, Steckel, JH and Gupta, A 2007, 'When do purchase intentions predict sales?', *International Journal of Forecasting*, vol. 23, no.3, pp. 347-364, viewed 2 October 2020, < https://www.sciencedirect.com/science/article/abs/pii/S0169207007000799>.

[44] Mushi, HM and Noor, NAM 2016, 'Consumer behavior and counterfeit purchase in the Tanzanian Mainland', viewed 2 November 2020, < https://www.researchgate.net/publication/310425972_CONSUMER_BEHAVIOUR_AND_COUNTERFEIT_PURCHASE_IN_THE_TANZANIAN_MAINLAND>.

[45] National Association of Manufacturers 2020, *Countering Counterfeits: The Real Threat of Fake Products*, viewed 11 November 2020, < https://www.nam.org/wp-content/uploads/2020/07/CounteringCounterfeits.vF_.pdf>.

[46] Ong, LT, Chiang, TS and Pung, XY 2015, 'To buy or to lie: Determinants of purchase intention of counterfeit fashion in Malaysia', International Conference on Marketing and Business Development Journal, vol. 1, no. 1, pp. 49-56.

[47] Organization for Economic Cooperation and Development (OECD) 2019, Trends in trade in counterfeit and pirated goods, viewed 11 November 2020, < https://www.oecd-ilibrary.org/trade/trends-in-trade-in-counterfeit-and-pirated-goods_g2g9f533-en>.

[48] Pallant, J 2013, *SPSS Survival Manual. A step-by-step guide to data analysis using SPSS*, 4th edition, New South Wales: Allen & Unwin.

[49] Phau, I 2010, 'Predictors and purchase intentions of counterfeits of luxury branded products', Curtin University of Technology, viewed 6 October 2020, < https://espace.curtin.edu.au/bitstream/handle/20.500.11937/43071/144455_24043_Phau%202%20counterfeit.pdf?sequence=2>.

[50] Phau, I, Prendergast, G and Chuen, LH 2001, 'Profiling brand-piracy-prone consumers: An exploratory study in Hong Kong's clothing industry', *Journal of Fashion Marketing and Management*, vol. 5, no. 1, pp. 45-55.

[51] Phau, I, Sequeira, M and Dix, S 2009, 'Consumers' willingness to knowingly purchase counterfeit products', *Direct Marketing: An International Journal*, vol. 3, no. 4, pp. 262-281.

[52] Quoquab, F, Pahlevan, S, Mohammad, J and Ramayah, T 2017, 'Factors affecting consumers' intention to purchase counterfeit product: Empirical study in the Malaysian market', *Asia Pacific Journal of Marketing and Logistics*, vol. 29, no. 3, viewed 10 October 2020, <https://www.researchgate.net/publication/318885077_Factors_affecting_consumers'_intention_to_purchase_counterfeit_product_Empirical_study_in_the_Malaysian_market>.

[53] Raza, MA, Ahad, MA, Shafqat, MA, Aurangzaib, M and Rizwan, M 2014, 'The determinants of purchase intention towards counterfeit mobiles phones in Pakistan', Journal of Public Administration and Governance, vol. 4, no. 3, viewed 4 October 2020, <https://www.researchgate.net/publication/269947127_The_Determinants_of_Purchase_Intention_towards_Counterfeit_Mobile_Phones_in_Pakistan>.

[54] Richter, F 2019, U.S. companies most affected by counterfeiting, *Statista*, viewed 30 October 2020, <https://www.statista.com/chart/17407/countries-most-affected-by-counterfeit-and-pirated-goods/#:~:text=With%20a%20combined%20share%20of,global%20customs%20seizures%20in%202016>.

[55] Samuels, P 2017, 'Advice on Exploratory Factor Analysis', *Reliability Analysis and Factor Analysis*, viewed 1 March 2021, <https://www.researchgate.net/publication/319165677_Advice_on_Exploratory_Factor_Analysis>.

[56] Saunders, M, Lewis, P and Thornhill, A 2019, *Research Methods for Business Students: Chapter 4 Understanding research philosophy and approaches to theory development*, 8th edition, Pearson, United Kingdom.

[57] Schober, P, Boer, C and Schwarte, LA 2018, 'Correlation coefficients: Appropriate use and interpretation', *Anesthesia & Analgesia*, vol. 126, no 5, pp. 1763-1768.

[58] Sekaran, U and Bougie, R 2016, *Research methods for business: A skill-building approach*, 7th edition, Wiley, United Kingdom.

[59] Setiawan, RF 2020, 'Analysis of factors affecting the interest of people to use DANA application using principal component analysis method (PCA)', International Research Journal of Advanced Engineering and Science, vol. 5, no. 1, pp. 226-232.

[60] Southey, G 2011, 'The theories of reasoned action and planned behavior applied to business decisions: A selective annotated bibliography', *Journal of New Business Ideas & Trends*, vol. 9, no. 1, pp. 43-50.

[61] Teo, CBC and Mohd Yusof, MZ 2017, 'The counterfeit goods conundrum: An analysis of demand situation among Malaysian consumers', *Journal of International Business, Economics and Entrepreneurship*, vol. 2, no. 2, pp. 11-19.

[62] The Star 2020, *'Putting an end to fakes'*, viewed 1 March 2021, < https://www.thestar.com.my/metro/metro-news/2020/09/04/putting-an-end-to-fakes>.

[63] Trademark Act (2019) Offence, Chapter 2 Part XV (2019) Laws of Malaysia viewed 10 January 2021, <http://www.myipo.gov.my/wp-content/uploads/2019/12/ACT-815-TRADEMARKS-ACT-201.pdf>.

[64] Verma, S, Kumar, R and Yadav, SK 2018, 'An empirical study on consumers' buying intentions of counterfeit products in India', *Journal of Intellectual Property Rights*, vol. 23, pp. 250-260.

[65] Vogt, WP and Johnson RB 2011, *Dictionary of statistics & methodology*, Sage Publications, California.

[66] Warshaw, PR, and Davis, FD 1985, 'Disentangling behavioral intentions and behavioral expectations', *Journal of Experimental Social Psychology*, viewed 1 October 2020, <https://www.sciencedirect.com/science/article/abs/pii/0022103185900174?via%3Dihub>.
[67] Wong, EL and Faiz, H 2018, 'More research needed on counterfeit goods in Malaysia, says global trademark body', *The Edge Markets*, viewed 2 November 2020, < https://www.theedgemarkets.com/article/more-research-needed-counterfeit-goods-malaysia-says-global-trademark-body>.
[68] Zikmund, WG, Babin, BJ, Carr, JC and Griffin, M 2010, *Business Research Method*, 8th edition, Cengage Learning.
[69] Znidersic, RK, Salai, S, Grubor, A and Maric, D 2013, 'Ethical consumer behavior in marketing', *International Journal of Multidisciplinary in Business and Science*, viewed 15 January 2021, <https://hrcak.srce.hr/132523>.