

RESEARCH ARTICLE

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DESIGN FOR ANTI-BRAND COUNTERFEIT AND BRAND PROTECTION THROUGH A STUDY OF SEMIOTICS AND CONSUMER VALS (VALUES AND LIFESTYLE)

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ABSTRACT

Lifestyle is a person's pattern of life expressed by one's activities, interests, and opinions. This study focused on VALS study of luxury goods (luxury brands) consumption. Counterfeiting is the main problem for luxury products and brands. This study aimed to analyze brand recognition, brand categorization and purchase intention of respondents in buying smartphone and perfume products designed in the attribute of name and appearance with a semiotic approach. This study used experimental design. The data were obtained through online questionnaires distributed to 120 respondents. The results from the respondents were recapitulated and tabulated and then tested with a research model of Two-Way Analysis of Variance (ANOVA). The results showed that there were significant purchase intention differences in identical, similar and different product names on smartphone and perfume products. These findings provide important theoretical and practical implications of how different purchase intentions in luxury goods that are counterfeited.

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INTRODUCTION

Lifestyle is a person's pattern of life expressed by one's activities, interests, and opinions. Lifestyle describes "a person as a whole" who interacts with the environment. Lifestyle also reflects a person's social class. VALS (Value, Attitude, and Lifestyles) approach is a psychographic market segmentation method created in 1970 to explain and predict the value, lifestyle, and consumption of the people of the United States. This approach was developed using a combination of several theories which are then called VALS research. This study focused on the VALS study of the consumption of luxury goods. The consumption of luxury goods (luxury brand) is a reflection of effort in finding the representation of an individual's social status to elevate one's social class (Vigneron and Johnson, 2004). Basic (2012) stated that consumers use luxury goods to make statements about themselves, create identities and develop a sense of belonging. Over the past few years, the luxury goods market has shown constant growth despite many factors that disrupt global trade. The luxury market has grown from USD \$20 billion in 1985 to USD \$68

billion in 2000 (The Economist, 2002 in Basic, 2012). Currently, the supply of luxury products such as in fashion, equipment, perfume, cosmetics, jewelry, automobiles, hotels, and interior decoration is increasing worldwide (Basic, 2012). There are only wealthy people who want to consume luxury products. Many consumers have the desire to buy products to project the image of wealth as well as a symbol to show their social class (Goffman, 1959). Consumers want to display prestige values in an effort to be accepted in a social situation, but not all consumers are willing to spend their money to buy luxury products (Perez, 2010). A large number of consumers who want to use luxury goods but are not willing to spend a lot of money triggers the phenomenon of counterfeiting. In some cases, potential customers were deceived by assuming that the goods they bought were genuine products. The vast availability of imitation goods can cause a decrease in the perceived quality of the original product and potentially erode consumer's trust for the brand (Green and Smith, 2002). The consumption of counterfeit luxury goods is driven by a perception of luxury product brands with low prices (Wiedmann, 2012). Based on research conducted by the Indonesian anti-counterfeiting society, the amount of GDP lost due to counterfeiting reached 0.06-0.38% of total GDP. The table below states the amount of loss suffered by the state due

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to counterfeiting (www.lontar.ui.ac.id accessed on 1 January 2016 at 19:00).

Table 1.1. The amount of Indonesia's loss from counterfeiting

Jenis Pemalsuan	GDP	Pendapatan Pajak	Jumlah Pengangguran
Pemalsuan yang berasal dari dalam negeri	Rp. 2,09 Triliun	Rp. 202,75 miliar	124.071 tenaga Kerja
Pemalsuan yang berasal dari Impor	Rp. 352,35 Miliar	Rp. 16,64 miliar	24.466 tenaga Kerja

Sources :www.lontar.ui.ac.id

The phenomenon of counterfeiting continues to expand over the years (Naim, 2006). Luxury brands and exclusive products are the main targets for counterfeiters. This practice of imitating and counterfeiting is increasingly widespread. Half of the national store brands in US supermarkets imitate the leader brand package at least in terms of color, size and shape (Scott Morton and Zettelmeyer, 2004). Two-thirds of buyers reported that these imitation products confused them, a third claimed to be hampered by similar packaging (Satomura, Wedel and Pieters, 2014). Counterfeiting and imitation threaten competitive products position, weakening brand equity and damaging the status associated with the product. Counterfeiting and imitation are a detrimental issue for luxury brands. Counterfeited goods generally copy well-known brands. The phenomenon of counterfeiting and imitation can occur at two different levels, they are at the level of attributes and abstracts (Horen and Pieters, 2012). Counterfeiting at the attribute level can be in the form of Counterfeiting the color, packaging, size or letter of the product brand while Counterfeiting at the abstract level can be in the form of Counterfeiting the benefits, purpose, or context of product use. Counterfeiting at the second level is categorized into 2, counterfeit and lookalike (Roux, 2015). Copycat or lookalikes are products that look similar to other branded products but are not identical. Balabanis and Craven (1997) defined lookalikes as products that have similar packaging characteristics to leading product brands. The counterfeit is equal to piracy while the lookalike is the same as imitation (copycat).

Typology in this study combined two types that can determine the concept of brand meaning: the type of logo operationalized as a brand name and product appearance operationalized as product design or packaging. The type of logo and product appearance are aspects that can be counterfeit at the attribute level. Companies imitate names, logos, and design packages from leading brands to take positive advantage of the brands and as an effort in marketing (Foxman, Muehling, and Berger, 1990; Kapferer, 1995, Loken *et al*, 1986. Simonson, 1994, Zaichkowsky, 2006). This study proposed various typologies of counterfeiting and imitation based on a semiotic approach where brands are a sensorial poly set of signs (Greimas and Courtes, 1979). Semiotics came from the Semion Greek word which means sign. In terms of terminology, semiotics can be defined as a study of a wide range of objects, events, all cultures as a sign (Indiawan, 2006). One of the scientists in the field of semiotics is Charles Pierce. Pierce distinguished the types of signs into: icon, index, and symbol based on the relation between the representation and its object, where the icon has the closest relation to reality, and the symbol is the furthest away from reality (Indian, 2006) The sign typology shows that semiotics is a relevant approach to form the level of difference in signs, in the context of this research, the signs in

question is brand design and packaging of products on luxury goods that have been counterfeited. The semiotic approach is even broader in understanding the brand as sensorial poly sets or organized signs (Greimas and Courtes, 1979). The brand consists of three levels which have immanence or permanent traits. The first level is logotype (Heilbrunn, 2006), which includes verbal aspects like spelling, words, sounds and visual aspects including colors, iconic units and types of settings. The second level is a certain appearance or trade-dress, typical of the product, shape, design, packaging, etc. The third level is in accordance with the sensorial characteristics of the product, like sound, taste, and smell. Counterfeiting and imitation can use or combine on each element of this level by using different levels of the similarity of the items copied in creating fake products. Roux (2015) studied the impact of counterfeiting and imitation by the semiotic approach at the attribute and abstract level on purchase intention. The attributes of counterfeiting and imitation studied were product names, product packaging, prices, and place of purchase of products. Roux (2015) found that counterfeiting and imitation at the level of attributes and abstracts described using semiotics can produce different purchase intentions. Roux (2015) divided the attributes of products name and packaging into three levels of semiotics: identical, similar and different to the names and packaging of genuine luxury products. The results of Roux's study showed that the combination of product names and packaging will result in different purchase intentions for consumers. Purchase intention is defined as a buyer's interest in a product brand so that it can drive a desire to buy and later will be able to move an action to buy informed products (Kotler and Keller 2012). Purchase intention is the tendency to buy a brand generally based on the suitability of the buying motive with the attributes or characteristics of the brand that can be considered (Belch, 2004). Purchase intention can be influenced by the definition of the brand name and the appearance of fake goods or imitation goods (Roux, 2015).

This study focused on the study of consumer behavior of students in the Faculty of Economics and Business, Airlangga University and Students in the Faculty of Communication Sciences, Mercu Buana University Jakarta, with an experimental approach. The researchers conducted the pretest procedure before carrying out the research by asking the students as the study population regarding the products they thought were the most counterfeited. The researcher proposed 4 types of products as the most counterfeited: perfume, electronics, alcoholic drinks, and smartphones, as also proposed by Roux (2015). The following table is the results of the pretest submitted by the students of the Faculty of Economics and Business, Airlangga University, and the Students of the Faculty of Communicationsciences, Mercu BuanaUniversity, Jakarta.

Table 1.2. Pretest for Products that are Widely Counterfeited

Product type	Total	Percentage
Perfume	9	30%
Electronics	5	16.7%
Alcohol beverage	3	10%
Smartphone	13	43.3%

Source: Appendix

The results of the table above showed that the students of the Faculty of Economics and Business, Airlangga University, and the student of the Faculty of Communication sciences, Mercu

Buana University, Jakarta stated that perfume and smartphone products are the two most counterfeited products. Therefore, the products to be tested or developed as the research stimuli were smartphone and perfume products and they became the indicators of research objects. Based on the description and assumption as outlined above, the title that the researchers choose was: “*A study of VALS (Value, Attitude, And Lifestyle) Indonesian Consumers on Luxury (Premium) Brands Against Counterfeiting and Brand Imitation*”.

Based on the background presented above, the main problems raised in this study are:

1. Are there differences in consumer purchase intentions for smartphone products between identical, similar and different product names?
2. Are there differences in consumer purchase intentions for perfume products between identical, similar and different product names?
3. Are there differences in consumer purchase intention for smartphone products between identical and different product appearance?
4. Are there differences in consumer purchase intention for perfume products between identical and different product appearance?
5. Are there differences in consumer purchase intentions for smartphone products between product names and product appearances?
6. Are there differences in consumer purchase intentions for perfume products between product names and product appearances?

MATERIALS AND METHODS

Literature Review

State of The Art: Andre Roux's study entitled “A typology of brand counterfeit and imitation based on a semiotic approach” used a conjoint analysis method to assess consumer preferences and to evaluate the importance of each variable and choice modality in each variable. Conjoint analysis enables the researcher to measure and evaluate consumer stimulation modeling which allows for assessment of stimulation identification, categorization and purchase intention. Femke van Horen's study entitled “Preference reversal for copycat brands: Uncertainty makes imitation feel good” used Anova statistical tests with experimental research design. The results of the three experiments indicated that uncertainty in product quality shows a condition of the consumers who have low uncertainty and realize that the imitation strategies used by the imitators are less favored and considered negative. The opposite condition is happen when the consumers are going abroad. They feel uncertain about the product quality, and it makes the imitation products are more preferred. Copycats are not fully considered as negative, it depends on the context where the imitators are evaluated.

Marketing Communication: The main assumption that underlies the concept of marketing communication is to convey brand messages to consumers. To achieve success, companies must determine the needs and desires of consumers of specific target markets and provide expected satisfaction better than competitors (Kotler and Keller, 2012: 5). Consumer preference is an attitude of consumers towards a product brand choice that is formed through an evaluation of various brands

in a variety of available choices (Kotler and Keller, 2009). The preference stage can be achieved by influencing and manipulating the consumers. Companies recognize consumer needs in order to obtain products with market orientation, based on the level of consumer preference for each product attribute. Preference can also be used to identify preference segments (Kotler and Keller 2007).

VALS (Value, Attitude and Lifestyle): VALS (Value, Attitude, and Lifestyles) approach is a psychographic market segmentation method created in 1970 to explain and predict the value, lifestyle, and consumption of the people of the United States. This approach was developed using a combination of several theories which are then called VALS research. These theories are: 1. Theory of human needs hierarchy. This theory was developed by Abraham H. Maslow. According to this theory, there are five levels of needs of human, they are basic physical needs, sense of security, belonging, esteem and self-actualization. VALS identifies the values adopted by the community on each of these needs; and 2. The theory of personality impulses (The Inner and Outer Directed Personality Theory), this theory was introduced by Riesman, Glazer and Denney (1950). The term of other directed then was changed by VALS to outer directed (push from outside). For this reason, VALS can also be easily applied to predict behavior and buying styles from business people and consumers. VALS typology creates 9 psychographic segments, they are: a. Survivors b. Sustainers c. Belongers d. Emulators e. Achievers f. I-am-me g. Experimentals h. Socially Conscious i. Integrated.

Luxury Brand: Nueno and Quelch (1998) explained that luxury brands are brands whose ratio of functional utility to price is low while the ratio of intangible and situational utility is high. McKinsey (1990) defined luxury brands as brands that are able to justify the importance of higher prices than products with comparable functions. Luxury brands are able to provide high culture for users (Bourdieu, 1984), which allows their owners to engage in superior appearance.

Counterfeiting and Imitation: Counterfeiting is one of the many problems for luxury brands. Counterfeited products are 100% direct copies which usually have low quality, although not always (Lai and Zaichkowsky, 1999). Imitation is a marketing strategy that is as common as an innovative strategy. This can occur because imitation is not only found in a mode or only limited to a number of industries, but imitation can be found in almost every nook and cranny of the economic life (Schnaars, 1994). It is important to distinguish direct imitation or piracy (counterfeiting) and imitation (copycat). Direct imitation or piracy is a fraud that is defined as a product that directly copies other products in which the product is of high prestige (Bian and Mointinho, 2009, Lai and Zaichkowsky, 1999 Nia and Zaichkowsky 2000, Wilox, Kim, and Sen, 2009). These pirated products are usually illegal, inexpensive, and generally of poor quality. While the imitation products, also called lookalike products, are products that look the same as other products but not exactly the same (Zaichkowsky, 2006). Horen and Pieters (2012) further explained that copycat brands are brands that imitate trade-dress brand leaders, such as brand names or packaging designs, which are ultimately intended to take advantage of the original products' reputation and as a marketing effort.

Purchase Intention: Adopting the definition by Kotler and Keller (2012), purchase interest is defined as consumer interest in the product so that it can lead to the desire to buy and cause an action of buying the products that have been informed.

Semiotics: Semiotics is a model of social science that understands the world as a system of relationships that has a basic unit with signs. Semiotics learns the nature of the existence of a sign. Semiotics expert, Umberto Eco called the sign as a 'lie' and in the sign, there is something hidden behind it and it is not the sign. Pierce distinguished the types of signs into: icon, index, and symbol based on the relation between the representation and its object, where the icon has the closest relation to reality, and the symbol is the furthest away from reality (Indian, 2006) Icon can be referred to as identical, index can be referred to as similar while symbols can be referred to as different.

Research Hypothesis

Impact of Counterfeiting on Product Name Attributes on Consumer Purchase Interests: Counterfeiting and imitation can use each element or combination of elements that make up the product name using different levels to make the counterfeited product. Name variable designed using the semiotic approach produces 3 semiotic levels: identical (no changes to the original product), similar (minor changes to the original product) and different (major changes to the original product) (Roux, 2015). Brand names are the dominant signal because they can activate strong and unique associations between brand names and product categories, which have an effect on buying interest (Roux, 2015). The name attribute is an easily observed attribute, generally, the brand name will encourage the desire to buy. The name that is designed exactly the same as the original brand can deceive the consumers, while the name is designed similar or different from the original brand will be easier to identify that the brand is fake, and it produces a different desire to buy (Roux, 2015). In line with Roux, Howard *et al.* (2000) stated that similar product name that sound has an impact on brand confusion. For these reasons, the following hypotheses are proposed:

H1: There are differences in consumer purchase intentions for smartphone products between identical, similar and different product names.

H2: There are differences in consumer purchase intentions for perfume products between identical, similar and different product names.

Impact of Counterfeiting on Product Packaging Attributes on Consumer Purchase Interests: Similar Quality and appearance to the original product cause confusion for consumers and even original goods producers (Bian and Veloutsou, 2007). Appearance variable uses semiotic approaches of identical (no change to the original product) and different (major changes to the original product) (Roux, 2015). Products that are similar in terms of packaging design between original and counterfeited product have higher purchase interest (Matos, Ituassu, and Rossi. 2007) The counterfeiting in appearance variable is at the attribute level so that when potential customers see a product that is similar then they will compare it with the original product (Roux, 2015). For these reasons, the following hypotheses are proposed:

H3: There are differences in consumer purchase intention for smartphone products between identical and different product appearance.

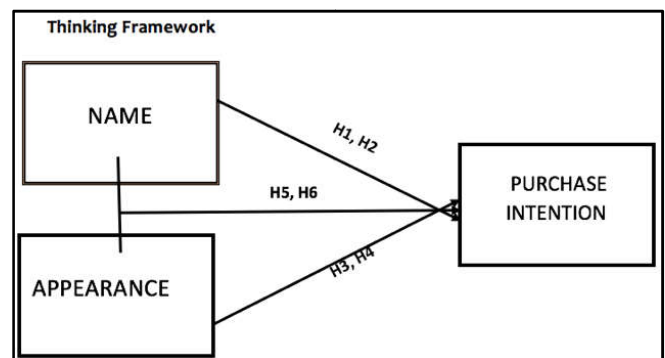
H4: There are differences in consumer purchase intention for perfume products between identical and different product appearance.

Impact of Counterfeiting on Product Attributes and Product Packaging on Consumer Purchase Interests: Companies imitate names, logos, and design packages from leading brands to take positive advantage from the brands and as an effort in marketing (Foxman, Muehling, & Berger, 1990; Kapferer, 1995; Loken *et al.*, 1986. Simonson, 1994; Zaichkowsky, 2006). Name and appearance are the dominant signs because they can activate strong and unique associations between brand names and product packaging designs that have an effect on purchase interest (Roux, 2015). For these reasons, the following hypotheses are proposed:

H5: There are differences in consumer purchase intention for perfume products between identical and different product appearance

H6: There are differences in consumer purchase intention for perfume products between identical and different product appearance

Framework of thinking



Method

The research approach used in this study was a quantitative research approach. This study used an experimental research design. The experimental design was the development of a true experimental design that was difficult to implement. In this experimental design, the researchers randomly assigned the test unit to the experimental group and also randomly assigned treatment to the experimental group (Malhotra, 2009). The control group could not fully function to control external variables that affect the conduct of experiments. Before designing a research stimulus design, researchers designed a data manipulation check. Manipulation check is a set of questions designed to determine whether participants can feel the manipulation takes place according to the researchers' objectives (Mitchell and Jolley, 2010). In this study, the manipulation check aimed to test whether the manipulation of name and appearance variables were realized by the respondent or not.

Operational Definition of Variables

Name Variable: Brand name is defined operationally as a set of distinctive signs that represent product ownership as a sensorial poly set or organized signs on smartphone and

perfume that are designed differently according to the semiotic level (Greimas & Courtes, 1979). Based on the results of the previous study (Roux, 2015) the researchers obtained the results that the name variable in this study was reviewed from CS Pierce Semiotics analysis which consisted of: Identical (no changes to the original product), Similar (minor changes to original products) and Different (major changes to original products).

Appearance Variabel: Appearance is defined operationally as a certain appearance or trade dress, typical of a product, including the shape, design, and packaging of smartphone and perfume products that are designed differently according to the semiotic level (Heilbrunn, 2006). Product appearance is operated as product design or packaging. Based on the results of the previous study the researchers obtained the results that the Appearance Variable in this study consisted of:

- Identical (no changes to the original product)
- Different (major changes to original products)

Table of variables Manipulation in the study and semiotic levels

Variable	Semiotic Levels
Name	Identical
	Similar
	Different
Different	Identical
	Different

For each manipulation variable at the semiotic level made in this study, the researchers asked questions related to brand recognition, brand categorization, and purchase intention. Brand recognition is operationalized into the indicator of "have seen a brand with a certain name design", brand categorization operationalized into the indicator of "official product category, not and fake/counterfeited products" and purchase intention operationalized into the indicator of a desire to buy and an attraction. The population in this study were students of the Faculty of Economics and Business, Airlangga University, Surabaya, and Students of the Faculty of Communication Sciences, Mercu Buana University, Jakarta. The selection of university students as the respondents was because they were easily accessible. Students are considered as representations of consumers who have homogeneity in terms of age, income, lifestyle, and others (Yavas, 1994). There were 120 participants in this study. Participants in this study were active students at the Faculty of Economics and Business, Airlangga University, Surabaya, and at the Faculty of Communication Sciences, Mercu Buana University, Jakarta. In determining the sample, researchers used nonprobability of a Convenience Sampling technique.

Research Instruments Tests

Validity and Reliability: The first property in this study was validity, which indicates whether the instrument actually measures what is desired. The second was reliability, which is whether the instrument can be interpreted consistently in all different situations. The validity of a measuring instrument is

obtained by correlating the scores of each item with a total score item. An item or indicator is declared valid if r count (corrected item-total correlation) has a value greater than the standard r , which is 0.3 (Solimun, 2005). If the measurement value is ≥ 0.3 then a statement is considered valid. Conversely, if the value is smaller than 0.3 then a statement is considered invalid and cannot be continued for the next process (Solimun, 2002). The technique used in research to measure internal consistency was Cronbach's alpha which is useful for measuring the level of reliability of consistency among the items in the instrument to measure certain constructs (Indriantoro and Supomo, 1999). Hair *et al* (1998) stated that if the alpha coefficient is ≥ 0.6 , the reliability criteria are considered high and the reliability is considered to have been fulfilled.

Two-Way ANOVA Test: ANOVA is a mean parametric testing procedure for more than two groups of data. In principle, the ANOVA test is to analyze the variability of data into two sources of variation, they are variation within group (within) and variation between groups (between). If the within and between variations are the same (the comparison value of the two variants is close to one), then there is no difference in the effect of the intervention, in other words, there is no difference in the mean value compared. Conversely, if the variation between groups is greater than variation within group, it means that the intervention has a different effect. This two-way ANOVA technique is used to determine the main effect and interaction effect of categorical independent variables on the metric dependent variable (Ghozali, 2009). In the significance column, if the alpha value is > 0.05 then the Two-Way ANOVA test can be considered valid Ghozali (2009). For the interpretation of Two-Way ANOVA, it can be done by looking at the Test of Between-Subject Effects table. In the Test of Between-Subject Effects table, if the F value is greater than the F value in the free degree at the significance level of 0.05 (F count $>$ F table), then this indicates that there is a variance or it can be said to have the influence differences of the variables studied.





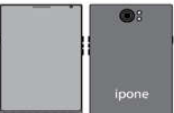

RESULTS

FINDINGS AND DISCUSSION

In giving treatment to respondents, this study used the design of within subject (design of within group), which only uses a group of subjects and each subject is given several different independent variable treatments. This research used within subject (design of within group) in order to obtain diverse results. This research was experimental manipulation carried out on the stimulus to test the hypothesis. Experimental studies that manipulate the form of visual appearance stimulus with identical, similar and different types, and appearance with the type of identical and different. The form of this research stimuli was the display of images given in no sequence both on smartphone and perfume products to avoid random effects. The first stimulus was similar name identical appearance, Second was Identical name different appearance, Third was different name different appearance, Fourth was identical name identical appearance, Fifth was different name identical appearance, Sixth was similar name different appearance.

Description of Purchase Intention Variable: The mean and standard deviation of each indicator in the purchase intention variable by 120 respondents is presented in the following table.

Table 4.1 Factorial Design on Smartphone Products

<i>Appearance</i>	<i>Name</i>		
	<i>Identical</i>	<i>Similar</i>	<i>Different</i>
<i>Identical</i>	<p>Stimuli 1</p>  <p><i>Identical Name Identical Appearance</i></p>	<p>Stimuli 2</p>  <p><i>Similar Name Identical Appearance</i></p>	<p>Stimuli 3</p>  <p><i>Different Name Identical Appearance</i></p>
<i>Different</i>	<p>Stimuli 4</p>  <p><i>Identical Name Different Appearance</i></p>	<p>Stimuli 5</p>  <p><i>Similar Name Different Appearance</i></p>	<p>Stimuli 6</p>  <p><i>Different Name Different Appearance</i></p>

Factorial Design on Perfume Products







<i>Appearance</i>	<i>Name</i>		
	<i>Identical</i>	<i>Similar</i>	<i>Different</i>
<i>Identical</i>	<p>Stimuli 1</p>  <p><i>Identical Name Identical Appearance</i></p>	<p>Stimuli 2</p>  <p><i>Similar Name Identical Appearance</i></p>	<p>Stimuli 3</p>  <p><i>Different Name Identical Appearance</i></p>
<i>Different</i>	<p>Stimuli 4</p>  <p><i>Identical Name Different Appearance</i></p>	<p>Stimuli 5</p>  <p><i>Similar Name Different Appearance</i></p>	<p>Stimuli 6</p>  <p><i>Different Name Different Appearance</i></p>

Table 4.2 Descriptive Statistics of Purchasing Intention Variable on Smartphone products

Category		Mean	SD	Category
Identical Name	Identical Appearance	3.375	1.023	Very high purchasing intention
	Different Appearance	1.679	0.832	Low purchasing intention
Similar Name	Identical Appearance	1.983	1.063	Quite high purchasing intention
	Different Appearance	1.262	0.476	Low purchasing intention
Different Name	Identical Appearance	1.417	0.702	Low purchasing intention
	Different Appearance	1.267	0.453	Low purchasing intention

Source: Appendix

Based on the data in table 4.2, the mean total response of respondents to the purchase intention variable on smartphone products was 1,831. The score on the purchase intention variable was quite high. This means that the majority of respondents have high purchase intention for smartphone products. Respondents' purchase intention on smartphone products that assumed an identical name and identical appearance was 3,375, which was very high mean of purchase

intention. Respondents' purchase intention on smartphone products that assumed an identical name and different appearance was 1,679, it had low purchase intention mean. Respondents' purchase intention on smartphone products that assumed a similar name and identical appearance was 1,983, it had quite high purchase intention mean. Respondents' purchase intention on smartphone products that assumed a similar name and different appearance was 1,262, it had low

purchase intention mean. Respondents' purchase intention on smartphone products that assumed a different name and identical appearance was 1,417, it had low purchase intention mean. Respondents' purchase intention on smartphone products that assumed a different name and different appearance was 1,267, it had low purchase intention mean.

The mean value in table 4.2 shows the value that varied on each combination of name and product packaging attributes. This shows that the respondent responds to the stimulus at each level of semiotics in different ways. The high and low of purchase intention shows the variation or diversity of respondents' purchase intentions on smartphone products. The combination of the Identical name and identical appearance will have a greater effect to deceive the consumer, this is indicated by the very high mean score of purchase intention on smartphone products. Different names combined with all types of appearance will result in low purchase intentions. This shows that consumers can easily identify product attributes that are completely different from the name of genuine luxury products, so consumers can easily conclude that the product displayed is imitation, thus respondents will have low purchase intentions. All products that are designed with different appearance will cause low purchase intentions, this indicates that in addition to the name attribute, consumers also pay close attention to the appearance attribute. The product packaging design that is completely different from the design of the original luxury product packaging is easily recognized by the respondent, therefore the respondents easily conclude that the product is an imitation. This is the reason why all products that are designed differently on the appearance attribute has low purchase intentions.

Table 4.3. Descriptive statistics of purchasing intention variable on perfume products

Category		Mean	SD	Category
Identical Name	Identical Appearance	2.717	1.0744	Very high purchasing intention
	Different Appearance	1.771	0.974	Quite high purchasing intention
Similar Name	Identical Appearance	3.275	0.993	Very high purchasing intention
	Different Appearance	1.346	0.600	Low purchasing intention
Different Name	Identical Appearance	1.362	0.615	Low purchasing intention
	Different Appearance	1.417	0.668	Low purchasing intention
Mean Total		1.981		Quite high purchasing intention

Source: Appendix

Based on the data in Table 4.3, the mean total responses of respondents to the purchase intention variable in perfume products was 1981. The score on the purchase intention variable is quite high. This means that the majority of respondents have high purchase intention for perfume products. Respondents' purchase intention on perfume products that assumed an identical name and identical appearance was 2,717, it had very high purchase intention mean. Respondents' purchase intention on perfume products

that assumed an identical name and different appearance was 1.771. it had quite high purchase intention mean. The respondent's purchase intention on perfume products that assumed a similar name and identical appearance was 3,275, it had very high purchase intention mean. The respondent's purchase intention on perfume products that assumed a similar name and different appearance was 1,346, it had low purchase intention mean. Respondents' purchase intention on perfume products that assumed a different name and identical appearance was 1,362, it had low purchase intention mean. Respondents' purchase intention on perfume products that assumed a different name and different appearance was 1,417, it had low purchase intention mean. The mean value in table 4.3 shows the value that varied on each combination of name and product packaging attributes. This shows that the respondent responds to the stimulus at each level of semiotics in different ways. The combination of the Identical name and identical appearance will have a greater effect to deceive the consumer, this is indicated by the very high mean score of purchase intention on perfume products. The different name combined with all types of appearance will result in low purchase intentions. This shows that consumers can easily identify product name attribute that is completely different from the name of a genuine luxury product, so consumers can easily conclude that the product displayed is an imitation, thus respondents will have low purchase intentions on perfume products. Identical appearance combined with various semiotic levels on the name will produce 2 high purchase intentions and 1 low purchase intention while the different appearance combined with 3 levels semiotic of product name produces 1 high purchase intention and 2 low purchase intentions. This shows that consumers can distinguish the original product packaging so that it produces different purchase intentions. In the next process, this study has six hypotheses that have gone through a series of data collection and testing processes. The Test Results have been described and the following table is a summary of the results of the hypothesis test.

Table 4.4. Summary of Hypotheses test results

Hypotheses	Conclusion
There are differences in consumer purchase intentions for smartphone products in terms of identical, similar, and different product names.	Accepted
There are differences in consumer purchase intentions for perfume products in terms of identical, similar, and different product names.	Accepted
There are differences in consumer purchase intentions for smartphone products in terms of identical and different product appearances.	Accepted
There are differences in consumer purchase intentions for perfume products in terms of identical and different product appearances.	Accepted
There are differences in consumer purchase intentions for smartphone products in terms of product name and appearance.	Accepted
There are differences in consumer purchase intentions for perfume products in terms of product name and appearance.	Accepted

This study aimed to determine the respondent's brand recognition, brand categorization and purchase intention in smartphone and perfume products that are designed for name and appearance attributes using semiotic levels. The respondent's brand recognition shows the condition in which the respondent feels he has seen smartphone designs and

perfume as indicated by the research stimulus, brand categorization shows that respondents categorize smartphone and perfume products as official, unofficial, and fake/imitation products while purchase intention indicates respondents' desire to buy smartphone and perfume products as indicated by the research stimulus. The Two-Way ANOVA test results showed that there are significant differences in purchase intentions for identical, similar and different product names on smartphone and perfume products so that hypotheses 1 and 2 are supported. The results of the Two-Way ANOVA test showed that there are significant differences in purchase intentions for identical and different product appearances in smartphone and perfume products so that hypotheses 3 and 4 are supported. The results of the Two-Way ANOVA test showed that there are significant differences in purchase intentions for the product name and product appearance in smartphone and perfume products so that hypotheses 5 and 6 are supported.

The variable name in semiotic design produces 3 levels of difference, they are identical, similar and different, whereas appearance variable produces 2 levels of difference, which are identical and different. Name and appearance that are designed according to the semiotic approach have proven to have an effect or have implications for differences in purchase intention that are significant in smartphone and perfume products. Van Horen and Pieters (2012) stated that there are 2 types of counterfeit, at the level of attributes and abstracts. counterfeit at attribute level is in terms such as color, shape, size, letters while counterfeit at abstract level is in terms such as benefit, purpose, or usage context. This study used semiotics which states that prospective consumers see the signs contained in the product which are then associated with their understanding obtained from previous consumption experience.

Variables of name and appearance are counterfeit at attribute level so that when prospective customers see a product they will compare with the original product. Attribute level counterfeit is most easily identified by prospective buyers. When the name of a fake luxury product is designed identical with an original luxury product, the prospective customer will be deceived and consider the fake product as an original product so that it will bring high purchase intention to prospective customers. The level of purchase intention of the prospective customers is significantly lower in smartphone designs that have similar and different product names for genuine smartphone products. This shows that consumers will easily evaluate the differences in the names of counterfeited products versus the original products, resulting in different purchase intentions. The description above shows that semiotics is a relevant approach to predict respondents' purchase intentions on certain attributes of the product. Based on the results of the test of the first and second hypotheses, it shows that there were significant differences in the purchase intention of smartphone and perfume products in the identical name, similar name, and different name. Respondents in this study have high purchase intention on smartphone design 1 and perfume design 2 because of the consumer lifestyle motivation of having limited income or financial access but they still want to own luxury goods even though basically the consumers eventually realize that the product they are buying is fake. Prospective consumers intentionally buy fake luxury products to get a positive connotation of luxury brands. prospective consumers who intend to buy smartphones and perfumes that are considered genuine will potentially be disappointed with the quality of smartphones and perfumes

because they are not in line with their expectations. In the tests of the third and fourth hypotheses, it shows that there were significant differences in the purchase intention on smartphone products and perfume in identical appearance and different appearance. The counterfeiting in appearance variable is at the attribute level so that when prospective customers see a product that is similar then they will compare with the original product. Attribute level counterfeit is the most easily identified counterfeit by prospective customers. When prospective consumers see the same product packaging design as the original one, prospective customers will feel deceived, confused, or consider the product to be an original product so that the purchase interest arises in smartphone and perfume products (Satomura, Wedel and Pieters, 2014). Packaging that is designed exactly the same as the original brand makes the potential customers deceived, while the packaging designed similar or different from the original brand, the prospective consumer will easily identify that the brand is fake and thus produce a different desire to (Roux, 2015). In the fifth and sixth hypothesis tests, it shows that there were significant differences in purchase intention on smartphone and perfume products in terms of product name and appearance. This research is in line with Roux's study in 2015 which showed that name and appearance are two factors that have an effect on respondents' purchase intention in product design. Regarding the combination of product name and appearance, there are different symptoms of purchase intention. In smartphone design, consumers have the highest purchase intention on smartphones design 1 which is a combination of identical name and identical appearance while the highest purchase intention on perfume happens in similar name and identical appearance design. This shows that consumers have a higher sensitivity to smartphone products compared to perfume products.

Conclusions

The results showed that there were significant purchase intention differences in identical, similar and different product names on smartphone and perfume products. These findings provide important theoretical and practical implications of how different purchase intentions in luxury goods that are counterfeited.

- Hypothesis 1 stating that there are differences in consumer purchase intentions for smartphone products between identical, similar and different product names was accepted.
- Hypothesis 2 stating that there are differences in consumer purchase intentions for perfume products between identical, similar and different product names was accepted.
- Hypothesis 3 stating that there are differences in consumer purchase intention for smartphone products between identical and different product appearance was accepted
- Hypothesis 4 stating that there are differences in consumer purchase intention for perfume products between identical and different product appearance was accepted.
- Hypothesis 5 stating that there are differences in consumer purchase intentions for smartphone products between product names and product appearances was accepted.

- Hypothesis 5 stating that there are differences in consumer purchase intentions for perfume products between product names and product appearances was accepted.

Suggestions and Implications

1. Future research is suggested to increase the number of respondents or expand the scope of the population so that it can be generalized to a larger population.
2. Future research is suggested to explore references related to consumer responses to luxury products that are counterfeited by using semiotic approaches and experimental methods.
3. The study of the effect of counterfeiting on purchase intention needs to be studied more deeply, considering that the hypothesis tests in this study show that there are differences in consumer purchase intentions on luxury products that are counterfeited both on name and appearance attributes.
4. Name and appearance are two attributes that greatly deceive consumers, seen from the existence of significant differences in purchase intentions on smartphone and perfume products in every level of semiotics. For this reason, it is necessary to test other variables that can be manipulated both at the attribute and substantial levels.

REFERENCES

- , 2006. *The psychology behind trademark infringement and counterfeiting*. Mahwah, NJ: Lawrence Erlbaum Associates.
- , 2007. *Manajemen Pemasaran*. Edisi 12, Jilid 1 dan 2. Jakarta: Pearson Education, Inc.
- , 2009. *Manajemen Pemasaran*. Edisi ketigabelas. Jakarta: Erlangga. 15
- , 2009. *Riset Pemasaran Pendekatan Terapan*. Edisi ke empat. New Jersey: Pearson Education Inc.
- , 2012. *Marketing Management*. 14th Edition. New Jersey: Prentice Hall.
- , 2012b. *when high-similarity copycats lose and moderate similarity copycats gain: the impact of comparative evaluation*. *Journal of Marketing Research*, 49(1), 83–91.
- A Nugroho, J Sihite. 2017. Brand Extension in the Marketplace: An Exploratory Study from Air Asia. *Journal of Economic & Management Perspectives*, 11 (3), 110-116
- Ang, S. H. Cheng, P. S. Lim, E. A. C. dan Tambyah, S. K. 2001. Spot the difference: *Consumer responses towards counterfeits*. *Journal of Consumer Marketing*, 18(3), 219–235.
- Balabanis, G. dan Craven, S. 1997. *Consumer confusion from own brand lookalikes: An exploratory investigation*. *Journal of Marketing Management*, 13, 299–313.
- Basic. 2012. *Effect of Lifestyle on Consumers of Luxury Goods*. *Journal of Basic and Applied Scientific Research*. Text Road Publication.
- Bian, X. dan Veloutsou, C. 2007. *Consumers' attitudes regarding non-deceptive counterfeit in the UK and China*. *Journal of Brand Management*, 14(3), 211–222.
- Commuri, S. 2009. *The impact of counterfeiting on genuine-item consumer's brand relationships*. *Journal of Marketing*, 73(May), 86–98.
- E.hauck William dan stanforth nancy. 2007. *Academic Papers Cohort perception of luxury goods and services*, *Journal of fashion marketing and management* vol.11. 175-188
- Greimas, A. 1966. *Semantique structurale: recherche et methode*. Paris: Larousse.
- Greimas, A. dan Courtès, J. 1979. *Sémiotique: dictionnaire raisonné de la théorie du langage*. Paris: Hachette.
- H Aima, N Surip, Wilhelmus Hary Susilo. 2015. Model of an influence communitization marketing 3.0 and behaviour segmentation on increase consumer value for higher education institution private university in Jakarta. *International Journal of Applied Business and Economic Research*, 13 (9), 6841-6852
- Heilbrunn, B. 2006. *Le logotype*. Paris: Presses Universitaires de France.
- Indiawan. 2006. *Semiotika Aplikasi Praktis bagi Penelitian dan Penulisan Skripsi Ilmu Komunikasi*. Jakarta
- Internasional Anti Counterfeiting Coalition. 2008. *Facts on Fakes*, (aceses January 2, 2009), (available at http://www.iacc.org/resources/Facts_on_fakes.pdf).
- Kotler, P. dan Keller, K.L. 2006. *Marketing Management*. 12 Edition. New Jersey: Pearson Education, Inc.
- Lai, K. K., & Zaichkowsky, J. L. 1999. *Brand imitation: Do the Chinese have different views?* *Asia Pacific Journal of Management*, 16(2), 179–192.
- Malhotra, K. Naresh. 2007. *Marketing Research: An Applied Orientation, Fifth Edition*. New Jearsey USA: Pearson Education, inc.
- McDonald, M. and Robert, C. 1994 *Products piracy: The problem that will not go away*. *Journal of Product & Brand Management* 3 (4): 55-65.
- Nia, A. dan Zaichkowsky, J. L. 2000. *Do counterfeit devalue the ownership of luxury brands?* *Journal of Product and Brand Management*, 9(7), 485–497.
- Nueno, J.L. dan Quelch, J.A. 1998. *The mass marketing of luxury*, *Business Horizons*, pp. 61-8, November-December.
- Perez. 2010. *Constructing identity through the consumption of counterfeit luxury goods*. *Qualitative Market Research: An International Journal*, Vol. 13 Iss 3 pp. 219 – 235
- Roux, Bobri dan The Bault. 2015. *A typology of brand counterfeiting and imitation based on a semiotic approach*. *Journal of Bussiness research*.
- Satomura, T. Wedel, M. dan Pieters, R. 2014. *Copy alert: A method and metric to detect visual copycat brands*. *Journal of Marketing Research*, 51(1), 1–13
- Scott-Morton, F. dan Zettelmeyer, F. 2004. *The strategic positioning of store brands in retailer-manufacturer negotiation*. *Review of Industrial Organization*, 24(2), 161–194.
- The Economist. 2002. *Special report: luxury goods*, The Economist, Vol. 23, pp. 61-3.
- Thomas, Dana. 2007. *Terror's Purse Strings*. The New York Times. (August 30), A23–A23.
- Tynan, C. McKechnie, S. dan Chhuon. C. 2010. *Co-creating value for luxury brands*. *Journal of Business Research*, Vol. 63 No. 11, pp. 1156-63.
- Van Horen, F. dan Pieters, R. 2012a. *Consumer evaluation of copycat brands: The effect of imitation type*. *International Journal of Research in Marketing*, 29(3), 246–255.
- Vigneron, F. dan Johnson, L.W. 2004. *Measuring Perceptions of Brand Luxury*. *Brand Management*, 11(6), pp.484–506.
- World Customs Organization. 2004. *Counterfeiting Congress Calls for Public Private Co-operation*, news release, (May 26).
- Zaichkowsky, Judith Lynne. 1995. *Defending Your Brand against Imitation: Consumer Behavior, Marketing Strategies, and Legal Issues*. Westport, CT: Quorum Books.