

# YOUNG WOMEN'S ATTITUDE TOWARDS COUNTERFEITING COSMETICS: AN EMPIRICAL STUDY

STOSUNEK KOBIET DO PODRABIANIA KOSMETYKÓW: BADANIE EMPIRYCZNE

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DOI: 10.2478/minib-2023-0024

## ABSTRACT

The present research aimed to pinpoint the factors shaping attitudes towards counterfeiting and how these attitudes influence the intention to purchase counterfeit products. The work tries also to take a step back from previous research contributions, to develop a model for understanding attitudes towards counterfeit products. To achieve this aim, a quantitative study was undertaken using a questionnaire survey was administered to a sample of 250 women in Algeria. To assess our hypotheses, a structural equation modelling (SEM) was employed. Findings showed that factors such as insensitivity to counterfeiting, economic considerations as well as perceived risk directly impact the attitude towards counterfeiting

**Key words:** attitude, counterfeit, consumer behaviour, economic aspect, perceived risk, purchase intention

## ABSTRAKT

Celem niniejszego badania było określenie czynników wpływających na postawy wobec podróbek oraz wpływu tych postaw na intencję zakupu podrobionych produktów. W pracy podjęto jednak próbę cofnięcia się o krok od wcześniejszych wkładów badawczych, aby modelować podejście do podrabianych produktów. Badanie ilościowe z wykorzystaniem ankiety przeprowadzono na próbie 250 kobiet w Algierii. Aby ocenić nasze hipotezy, zastosowano modelowanie równań strukturalnych (SEM). Wyniki wykazały, że czynniki takie jak niewrażliwość na podrabianie, aspekt ekonomiczny, postrzegane ryzyko bezpośrednio wpływają na postawę wobec podrabiania.

**Słowa kluczowe:** postawa, podróbki, zachowania konsumentów, aspekt ekonomiczny, postrzegane ryzyko, cel zakupu

JEL: M31

Type of the work: research article

[Article History](#)

**Received:** April 23, 2023 | **Revised:** November 10, 2023 | **Accepted:** November 20, 2023

## Introduction

The rise in counterfeit goods can be attributed to the expansion of global trade, the emergence of new markets, rapid technological development, and a rise in valuable products being counterfeited (Borekçi, 2013).

The consequences of counterfeiting extend beyond causing harm to manufacturers of genuine products and brands, to affect hundreds of thousands of jobs (Hanzaee & Taghip, 2012). At the macroeconomic level, counterfeiting even creates economic deficits in many countries, leading to job losses, and encouraging the development of an underground economy that escapes taxation, and mobilises significant resources to fight against

this scourge at the national level, notably through costly communication campaigns (Viot et al., 2006). Counterfeiting is a shortfall for companies whose brands are subject to counterfeiting. Opinions are sometimes divided as to the damage because people who buy a fake brand would not have the means to afford the original brand. Some counterfeits represent a danger to the health and safety of the people who buy them because they do not meet the safety standards imposed on regular imports (Viot et al., 2006).

Previous research studies have explored various factors that contribute to the purchase of counterfeit products. Penz and Stöttinger (2006), for instance, argue that while most of the researches in the literature have emphasised on investigating the reasons why manufacturers committed counterfeiting (the supply side of counterfeiting), few studies have examined the reasons why consumers buy pirated and original brands (the demand side of counterfeiting) (Triandewi & Tjiptono, 2013). A qualitative study conducted in the UK by Hoe et al. (2003), has shown that some consumers buy counterfeit products as a substitutes for genuine ones to own the original brand, which would help them to establish their own identities and social standing (Hmidi, 2016). Besides, Yoo and Lee Hee (2012) showed that prior purchases positively impact future purchases (Santi, 2012). Eisend and Schuchert-Guler (2006) have shown that the most common reason for buying them is essentially relative to their affordable prices. Indeed, researchers identified non-price factors that influence the demand for counterfeit brands and products, including the characteristics of counterfeit products in terms of exclusivity, prestige, and quality, as well as the advantages of perceived benefits and self-identity. In the same vein, Cordell et al. (1996) identified the psychographic characteristics of individuals; Solomon and O'Brien (1991) identified the demographic variables; Stone and Gronhaug (1993) identified social visibility; and Wang et al. (2005) identified two cost-benefit factors and the risks of prosecution (Ben Othman, 2013).

Our research work aims to study the factors shaping the attitude towards counterfeit products and their impact on the purchase intention to buy such items. Therefore, we will try to propose a model which could help understand the attitudes towards counterfeit product, based on previous research contributions.

## Literature Review

Counterfeit purchasing decision-making is largely influenced by attitudes, regardless of product category (Chang, 1998; Hoon Ang et al., 2001; Wee et al., 1995). Indeed, the more the attitude towards counterfeiting is favourable, the more the consumer is led to buy a counterfeit brand and vice versa (Phau & Teah, 2009). Le Roux et al. (2007) and Wee et al. (1995) also tested models including attitude variables towards counterfeit products and in particular the general attitude towards counterfeiting. Before examining attitudes towards counterfeit consumption in more detail, it is necessary to conduct a literature review to situate the notion of attitude among prevalent studies in the literature.

The cognitive component is comprised of thoughts, beliefs, or ideas about the attitude object. Beliefs are thereby understood to be associations or relationships that people establish between the attitude object and various attributes (Kroenung & Eckhardt, 2011).

The affective component consists of emotions, feelings, or moods that people experience, when they are confronted with a certain attitude object. On a measurement level, these responses can range from extremely positive to extremely negative (Albarracín et al., 2005). The study of this component provides a better understanding of the consumer purchase process. It is because of this component that, depending on the constraints that arise, a consumer decides to choose one product over another (Festinger, 1957).

The conative component (behavioural) is a verbal or manifest (non-verbal) behavioural tendency by an individual and consists of observable actions or responses that are the result of an attitude object. It involves the person's response (favourable/unfavourable) to do something about the attitude object. Responses to attitudes are more or less consistent (Vishal, 2014).

Moreover, Wilcox et al. (2009) defined counterfeits as "genuine fakes" that are copies of original products having high brand value in the market and are made to deceive consumers in the market. Similarly, Wee et al. (1995) pinpoint that counterfeiting is the production of copies that are identically packaged, including trademarks and labelling, copied so as to

seem to a consumer the genuine article. From a consumer perspective, we can categorize counterfeiting in two ways: deceptive and non-deceptive counterfeiting. This classification can be done according to the level of awareness of the consumers because in deceptive counterfeiting, consumers are not aware of the fact that the products they are purchasing are counterfeits. They are rather victims in a way. However, in some situations, consumers are fully aware that the product they are buying is counterfeit. In these cases, counterfeiting is defined as non-deceptive (Borekçi, 2013).

Usually regarded as a serious economic, social, and political problem, counterfeiting has both positive and negative effects attached to it. Counterfeits pose a significant risk to consumers. Unsafe fake goods can lead to injuries, deaths, and illnesses. In cases where fake goods cause no physical harm, consumers are harmed financially when they are hoodwinked into spending their hard-earned cash on low-quality counterfeit. Moreover, since businesses must raise their prices to recoup losses from counterfeiting, the public is "forced to pay higher prices for brand-name products because of counterfeiters" (Lewis, 2009). Additionally, legitimate businesses are threatened by counterfeiters who become their competitors, a thing which makes these businesses lose sales and market share (Lewis, 2009). While most studies emphasize on the losses caused by counterfeiting, there are very few studies which highlight the potential benefits it can have. Counterfeiting might save consumer money and allow him/her to buy other goods. It can also raise sales of legitimate products by allowing consumers to test products through their counterfeit versions (Counterfeiting, 2018).

## **Determinant of attitude towards counterfeiting**

Our research work integrates a conceptual model on determinants that can influence attitude towards counterfeiting, that is, insensitivity to counterfeiting, brand attachment, economic aspect, and perceived risk. We also explore how consumer attitudes influence their intention to purchase counterfeit items.

## **Insensitivity to counterfeiting**

Counterfeit insensitivity as coined by Kapferer and Laurent (1992), refers to the concept of 'brand sensitivity', as a psychological construct that influences the decision-making process of the consumer, just before the act of purchase. This psychological variable takes into account the consumer's consideration of counterfeit presence or absence while buying a product. Consequently, we will extent this notion by hypothesizing that:

H1: Insensitivity to counterfeiting influences the favourable attitude towards counterfeiting.

## **Attachment to the brand**

Based on research addressing brand loyalty, the attachment approach proposed by Lacoeyuilhe (2000) refers to research work on brand equity and commitment in the field of organisational behaviours. According to this approach, attachment to the brand is defined based on the transfer of the constituent elements of attachment to the object to that of the brand. Thus, this integrative approach to brand loyalty is based on the notion of brand equity so as to facilitate movement from attachment to the object to attachment to the brand (Lacoeyuilhe & Belaid, 2007). Indeed, this study considers attachment to the brand as an explanatory variable directly influencing the attitude towards counterfeiting. Therefore, we propose the following hypothesis:

H2: Attachment to the brand influences the favourable attitude towards counterfeiting.

## **Economic aspect**

The price difference between the original and the counterfeit product is presented as a crucial variable to predict the attitude and

the intention to buy counterfeit products. However, the impact of price can vary from positively encouraging purchases (low price of counterfeits, which encourages purchase) to negatively deter them (a low price can be associated to low quality in the mind of the consumer). A study conducted by Prendergast et al. (2002), showed how price can be the overriding criterion, revealing that the higher the original product's price, the more consumers are willing to buy counterfeit items (Harvey & Walls, 2003). This reaction stems from the consumers' tendency to always link quality to price. Indeed, the more the consumer tends to infer a level of quality from the price, the more he will tend to equate counterfeits—generally sold at a low price—with mediocre quality products (Viot et al., 2014). While price may intuitively appear as a determining variable of the propensity to buy counterfeit products and of the attitude towards counterfeiting, researchers have somewhat lost interest in this variable. Therefore, our research work integrates the economic aspect as a determinant influencing the attitude towards counterfeiting. Starting from this assumption, it is hypothesized that:

H3: Economic aspect affects the favourable attitude towards counterfeiting.

### **Perceived risk**

Volle (1995) defined risk as "*the possibility of incurring losses when purchasing or consuming a product (good or service)*". In contrast, Solomon and O'Brien (1991) show that consumer-perceived risk is a decision-making characteristic measuring the extent to which there is uncertainty regarding potentially significant and/or disappointing outcomes that may arise from a decision. Perceived risk can be presented in different facets. The perceived risk variable is considered in our research work as a determinant of attitude towards counterfeiting. This assumption leads to the following hypothesis:

H4: Perceived risk influences the favourable attitude towards counterfeiting.

## Attitude towards counterfeiting

Fishbein and Azjen (1975) define the concept of attitude as "*a learned predisposition to react favourably or unfavourably to an object or a class of objects*". An attitude can be defined also as "*a learned predisposition to behave in a consistently favourable or unfavourable manner with respect to a given object*" (Schiffman et al., 2010, p. 246). In the context of counterfeiting, Hoon Ang et al. (2001), state that consumers' attitude towards counterfeiting is a significant determinant of their intention to buy counterfeit products. Indeed, in this study, the attitude towards counterfeiting will be either positive or negative towards the purchase intention of purchasing counterfeit products. We will test empirically the possible causal link between the attitude of consumers and the purchase intention of counterfeit products. Consumers with a more positive attitude towards counterfeiting are more likely to be inclined to use counterfeit products. Starting from this assumption, the following hypothesis is formulated:

H5: Attitude towards counterfeiting influences purchase intention.

## Purchase intention

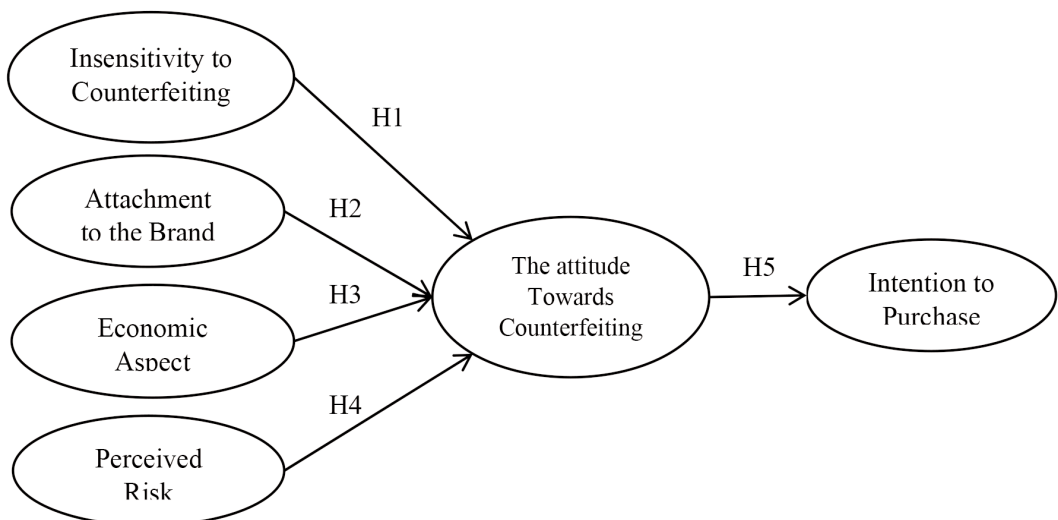
According to the theory of reasoned action of Ajzen and Fishbein (1980), attitudes influence behaviour through behavioural intentions. This relationship between attitude and intention has been discussed in various marketing and consumer behaviour studies. We will try to transpose this reasoning in order to study the role of the favourable attitude towards counterfeiting in determining consumer's purchase intention of counterfeit products. Consistent with Fishbein and Ajzen's (1975) extended attitude model, behavioural intention (in this case, purchase intention of counterfeits) is more related to attitude towards that behaviour, i.e., attitude towards the purchasing counterfeits than to the attitude towards the object itself (the attitude towards the counterfeit). Bergeron (2004), for his part, defines purchase intentions as "*the degree of conviction perceived by a consumer to buy (or repurchase) a particular product or service or to do*



(or redo) business with a particular organization". We are interested in purchase intentions because they involve the individual and are more predictive of the individual's future behaviour (Fishbein & Ajzen, 1975).

Drawing from the literature review, and after having defined the different concepts related to our research questioning, we propose a measurement model that can explain the consumer's attitude towards counterfeit products and the factors that influence this attitude in Figure 1 below.

**Figure 1. Basic model for PLS path modelling processing**



Source: Elaboration by the authors. PLS, partial least squares.

## Research Methodology

The scales of measurement and questionnaire of the study consumers' attitudes towards counterfeit cosmetics have been conceptualised around 6 variables, 13 constructed (dimensions), and 32 indicators (items) that are operationally defined as follows:

- Attitude towards counterfeiting with four dimensions refers to users of traditionally counterfeit products; additionally, the enthusiasm of

consumers for brands of certain categories of products has the result that these become the preferred targets of counterfeiting (Viot et al., 2006).

- Insensitivity to counterfeiting with two dimensions refers to consumer choices between one brand and another, and it can use different elements of information to make its decision: such as the colour, appearance, and image of the brand (Mourad, 2014).
- Intention to purchase with three indicators refers to the likelihood that a person uses the same items for a future consumer opportunity (Cronin et al., 2000).
- Attachment to the brand with four indicators refers to work on brand equity and engagement in the field of organisational behaviour (Lacoeuilhe, 2000).
- Perceived risk with three dimensions refers to regulations and safety standards for the people who use them and for the environment (Stone & Gronhung, 1993).
- Economic aspect with two dimensions refers to counterfeit cosmetics that are sold at significantly lower prices than the originals and prices that positively influence the likelihood of buying counterfeit cosmetics (Viot et al., 2006).

In order to estimate our model and to verify the hypotheses of this research work, we adopted the structural equation modelling (SEM) analysis with partial least squares (PLS) path modelling. Its ability to model composites and factors makes it a formidable statistical tool for new technology research (Henseler et al., 2016). We can describe the counterfeit attitude and purchase intent as exogenous constructs that are equivalent to latent independent variables. These latent variables are not measurable or directly observable but can be represented through four observed or measured variables. For this, we developed the questionnaire and the selection of items according to study variables.

For our study, the target population consists of young women consumers of cosmetics products of all sociodemographic categories from 18 years to 39 years of age. In our case, we opted for non-

probability sampling methods. A sample of 250 women was selected by the convenience method for lack of budget. This sample size is amply sufficient since we are using variance-based SEM because the minimum size is determined by 10 times the largest number of formative indicators ( $04 \times 10 = 40$ ) used to measure a single construct (Hair et al., 2013).

The questionnaire was administered face-to-face and online. The survey link was posted on the social network 'Facebook' and was also e-mailed to a few friends. Additionally, we shared our questionnaire on pages and groups dedicated to women. We aimed to select the responds from locations closer to our target and to cover various Algerian cities including Tlemcen, Algiers, Ain Temouchent, and Oran. Data were collected from 250 consumers, and after eliminating the invalid questionnaires, we had a return of 235 questionnaires (205 face-to-face and 30 online).

We used the SPHINX V5 software to perform descriptive data analysis. Additionally, SPSS V18 and Smart PLS V3 were used in order to determine the dimensions of attitude towards counterfeit cosmetics products.

## Results

We present the results of the descriptive analysis, which was conducted by making use of the multiple-choice question format, and which considers the general characteristics of our sample, namely age, salary, and socio professional category. The results of the socio demographic characteristics of the sample revealed that, among the respondents, 58.7% were female students, 24.7% were employees, and 8.1% were in administrative roles. As for their age, 61.3% fell within the 18 years to 24 years; whereas 26% were between 25 years and 29 years old. As far as their income is concerned, 55.7% of the sample had no income, while 20.9% had an income less than 25,000 DA and 19.1% had an income between 26,000 DA and 45,000 DA. Table 1 below represents the sociodemographic characteristics.

**Table 1. Sociodemographic characteristics**

		Nb. cit.	Freq. (%)
Age (years)	18-24	144	61.3
	25-29	61	26.0
	30-34	19	8.1
	35-39	11	4.7
Salary	No income	131	55.7
	Less than 25,000 DA	49	20.9
	Between 26,000 DA and 45,000 DA	45	19.1
	Between 46,000 DA and 65,000 DA	8	3.4
	Between 66,000 DA and 85,000 DA	1	0.4
	More than 86,000 DA	1	0.4
Socio professional category	Farmer	0	0.0
	Employee	58	24.7
	Trader	2	0.9
	Frame	3	1.3
	Student	138	58.7
	Workwomen	0	0.0
	Unemployed	10	4.3
	Administrative	19	8.1
	Other	5	2.1
Total		235	235

Source: Sphinx V5 Data.

## Evaluation of the reliability and validity of the measurement model

In the initial model for PLS PM processing, each construct (latent variable) was related to its measurements by a reflective mode. At the beginning, we had 32 items, but after the deleting items with a value less than 0.7, only 29 items were selected.

In the following section, we will present the results of the measurement model (manifest variables – latent variables) and those of the structural model (latent variables between them). The measurement model concerns the reliability and validity tests of the links between the manifest variables and the

latent variables. These tests encompass three aspects: the convergent validity, the reliability of the measurements, and the discriminant validity. A first analysis of the model made it possible to assess the convergent validity of the manifest variables by referring to the correlations between the latter and their respective constructs. As distinct from other empirical studies, we applied the strong convergence criteria proposed by Fornell and Lacker (1981). The no-convergent variables are those whose correlation coefficients are lower than 0.7 in absolute value. After removing all the measurement variables that did not meet the convergence conditions, we have re-estimated all measurement and structural relationships. The set of constructs were represented at least by two measures whose convergence were verified. Thus, the attachment (Att) results were represented by manifest variables 'Att1', 'Att2', 'Att3', and 'Att4'. Differentiation (Diff) was represented by two measures: 'Diff1' and 'Diff2'. The consideration of psychological risk (RisP) was measured using three variables: 'RisP1', 'RisP2', and 'RisP3' (more details about questionnaire items are provided in Appendix).

Reliability provides information on the average of the variance extracted (AVE) by the construct with respect to measurement errors. Two tests were employed: the AVE higher than 50% and the composite reliability 'CR' greater than 0.7. The results of these two tests are shown in Table 2 which indicate that our latent variables met these criteria confirming the reliability of our measurements.

**Table 2. Reliability of measures (CR and AVE)**

Latent variable	CR	AVE
Threshold	>0.7	>0.5
Excessive	0.89	0.73
Affective	0.93	0.87
Attachment	0.88	0.66
Low price	0.89	0.80
Cognitive	0.85	0.73
Past behaviour	0.85	0.74
Differentiation	0.81	0.68
Physical risk	0.92	0.78
Psychological risk	0.87	0.69
Rejection	0.82	0.60

AVE, average of the variance extracted; CR, composite reliability; PLS, partial least squares.  
Source: Smart PLS V3 data.

This measure ensures that the manifest variables are more related to their constructs than to other latent variables. In empirical studies, the comparison is made between the square root of the AVE of the construct in question and the correlations of the latter with the other constructs. The principle remains the same with regard to the comparison of the AVE with the square of the correlations. The set of discriminant validity measures is presented in Table 3. These results demonstrate the 'independence' of our latent variables from one another: the discriminant validity is thus verified.

**Table 3. Discriminant validity  $\sqrt{AVE} > Cor$**

	1	2	3	4	5	6	7	8	9	10
<b>Criterion validity</b>	<b><math>\sqrt{AVE} &gt; Cor</math></b>									
Excessive	<b>0.85</b>									
Affective	0.09	<b>0.93</b>								
Attachment	-0.07	-0.27	<b>0.81</b>							
Low price	0.34	0.35	-0.07	<b>0.90</b>						
Cognitive	0.04	0.48	-0.17	0.33	<b>0.86</b>					
Past behaviour	0.10	0.40	-0.12	0.16	0.23	<b>0.86</b>				
Differentiation	0.04	-0.16	0.25	-0.18	-0.24	-0.03	<b>0.83</b>			
Physical risk	0.08	-0.20	0.29	-0.12	-0.27	-0.01	0.26	<b>0.89</b>		
Psychological risk	-0.07	-0.25	0.41	0.01	-0.06	-0.21	0.09	0.22	<b>0.83</b>	
Rejection	0.05	-0.27	0.43	-0.02	-0.21	-0.17	0.30	0.15	0.37	<b>0.78</b>

AVE, average of the variance extracted; RMSEA, Root Mean Square Error of Approximation; SRMR, Standardized Root Mean Square Residual; PLS, partial least squares. The diagonal of the bold table indicates the AVEs for each latent variable, the other values concern the squares of the correlations between the different latent variables.

Notes : Fit values ; RMSEA=0.043, SRMR = 0.07, NFI=0.95. Source: Smart PLS V3 data.

Table 3 shows also good model fit. The Root Mean Square Error of Approximation (RMSEA) below 0.06 and Standardized Root Mean Square Residual (SRMR) below 0.08 (Hu & Bentler, 1999). Therefore, we conclude that our model accurately represented the data.

The  $R^2$  values for the two latent variables are 0.201 and 0.002, respectively. The regression coefficients are indicated on the links (arrows) between the exogenous and endogenous latent variables. Thus, a positive effect is recorded for the construct Economic Aspect on the attitude towards counterfeiting with the coefficient of 0.257; on the other hand, a negative effect is recorded for the built-insensitivity to counterfeiting and perceived risk, with coefficients of  $-0.232$  and  $-0.148$ , respectively.

Wetzels et al. (2009) specified Goodness of Fit 'GOF' criteria to determine if GOF values are unadjusted when GOF is less than 0.1, small when GOF value is between 0.1 and 0.25, medium when GOF value is between 0.25 and 0.36, and large when the GOF is greater than 0.36; for this purpose, we consider it a valid global PLS model. Thus, the formula for calculating GOF is as follows:  $\mathbf{GOF} = \sqrt{(\mathbf{R}^2 \times \mathbf{AVE})}$ .

Following the given criteria and the value of the calculated GOF of our model, which is  $\mathbf{GOF} = \mathbf{0.234}$ , we can conclude that the adjustment quality of the model is small, and is thus enough to be considered as an indication of the overall validity of the PLS model.

The results of the hypothesis tests from the field survey indicate that, subsequent to the application of the Bootstrap method concerning hypothesis H1 (which states that insensitivity to counterfeiting has a significant influence on the attitude towards counterfeiting), the Student's test is equal to  $3.235 > 2$ , and H1 is accordingly validated. The hypothesis H2 indicates that attachment to the brand has a significant influence on the attitude towards counterfeiting; the Student's test is equal to  $1.035 < 2$ , and there is thus no influence; accordingly, hypothesis H2 is rejected. H3 represents the position that the economic aspect influences the favourable attitude towards counterfeiting; the Student's test is equal to  $4.097 > 2$ , and thus there is a significant influence, resultant to which the hypothesis stands validated. The results of the application of the Bootstrap method revealed that the Student's test of H4 is equal to  $2.010 > 2$ ; so, the perceived risk influences directly the attitude towards counterfeiting and accordingly this hypothesis is validated. H5 represents the position that the attitude towards counterfeiting has a significant influence on the intention to purchase, and the Student's test is equal to  $0.617 < 2$ ; so, there is no

influence, resultant to which hypothesis H5 is rejected. The results for the path coefficients for the hypothesis testing in this study, including standard error and *T*-values, are shown in Table 4 below.

**Table 4. Path coefficients and their significance**

	Relation	Standard error	<i>T</i> -values
H1	Insensitivity ⇒ Attitude	0.072	3.235
H2	Attachment ⇒ Attitude	0.071	1.035
H3	Economic Aspect ⇒ Attitude	0.063	4.097
H4	Perceived Risk ⇒ Attitude	0.073	2.010
H5	Attitude ⇒ Purchase Intention	0.076	0.617

PLS, partial least squares.

Source: Smart PLS V2 data.

## Discussion of Results

Based on the results of our empirical study, we conclude that through descriptive analysis that the majority of female consumers in our sample fall within the age of 18–24 years and 25–29 years. The frequency of purchasing of cosmetic products among the Algerian consumer varies between monthly and weekly, which proves that Algerian consumers buy cosmetics products to improve self-image and well-being.

Hypothesis H1, which states that insensitivity to counterfeiting has a significant influence on the attitude towards counterfeiting, is thus confirmed. There is a relationship between insensitivity to counterfeiting and the attitude towards counterfeiting. When analysing the results, we found that the consumers are sensitive to counterfeit products, shaping their attitude. However, H2 hypotheses, which suggests that the brand attachment has no influence on the attitude towards counterfeiting is rejected, because it was noticed that whenever the consumer's degree of attachment towards the original brand rises, their attitude will be negative towards counterfeit products, but this has no direct influence. As for both



hypotheses H3 and H4, the economic aspect and the perceived risk have a direct influence on the attitude of the Algerian consumers with regard to counterfeiting, and subsequently these two variables are validated. Concerning the last hypothesis H5, the attitude towards counterfeiting does not have a direct influence on the purchase intention, that is to say, the purchase decision that will be made by the consumer has no relation to this variable, whereas the consumer who purchases counterfeit products may be an individual harbouring a negative attitude towards counterfeit products, which would nevertheless not override her decision to make a purchase. Accordingly, this hypothesis is rejected.

## Conclusion

This research work integrates a conceptual model investigating the determinants of counterfeiting behaviour and its impact on purchase intent, which encompasses insensitivity to counterfeiting, brand attachment, perceived risk (physical, psychosocial, social), and finally the economic aspect. This research allowed us to test the effect of consumer attitudes on the purchase intentions of counterfeit cosmetics. According to the results of our descriptive analysis, it has been shown that the majority of respondents are female students, and that their age varies between 18 years and 24 years. The results of this analysis indicate the high price of original products drive women to buy counterfeit cosmetics. Therefore, we conclude that two hypotheses are rejected; the attachment to the brand does not influence the attitude towards counterfeiting, and the purchase intention is not influenced by the attitude towards counterfeiting. However, the remaining three hypotheses are confirmed, i.e., insensitivity to counterfeiting directly influences the attitude towards counterfeiting, and the economic aspect and the perceived risk have an influence on the attitude towards counterfeit products. Thus, our analysis showed convincing results and made it possible to meet the research objectives.

This approach allows us to propose relevant managerial implications particularly for product and brand management would effectively fight

against counterfeiting. At the managerial level, the results of the present research are pertinent to the original brand companies. Indeed, the results obtained make it possible to ascertain the factors and motivations that push the consumers to buy the counterfeit products instead of the original ones so they will be more cautious in their strategic and operational choices. Our research explores the brakes and motivations of women consumers to purchase counterfeit products. For both governments and businesses, it is crucial to redirect consumers from the purchasing counterfeit products. Personal determinants such as social risk, physical risk, or doubts about the origin of the products seem to be effective strategies to fight against the purchase of counterfeits. At the theoretical level, the present work makes it possible to well define the concept of the counterfeit, consumers' motivations, as well as factors influencing the attitude of the consumer towards the counterfeiting of such products. Additionally, our research is an attempt to contribute to a recent literature. We have proposed a model that illustrates the different determinants and the effect of consumer attitudes towards counterfeiting. These results can be used to fight against counterfeiting more effectively.

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## Appendix

### Questionnaire items

Variables	Items	Questions	Reference
Attachment	Att1 Att2 Att3 Att4	<ul style="list-style-type: none"> <li>• I have a lot of affection for this brand.</li> <li>• I find some comfort in buying or owning this brand.</li> <li>• I relate to this brand very much.</li> <li>• I am very attracted to this brand.</li> </ul>	Lacoeuilhe (2000)
Differentiation	Diff1 Diff2	<ul style="list-style-type: none"> <li>• Counterfeiting is not solid.</li> <li>• Counterfeiting can never match a luxury product.</li> </ul>	Mourad (2014)
Psychological risk	RisP1 RisP2 RisP3	<ul style="list-style-type: none"> <li>• When I think about buying a product, I get anxious.</li> <li>• The purchase of a product makes me psychologically uncomfortable.</li> <li>• Thinking about buying a product makes me feel tense.</li> </ul>	Stone and Gronhung (1993)

Source: Elaboration by the authors.

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