



## Cosmetic Usage: Understanding How Major Determinants Are Affecting Users

Norudin Mansor  
Desnika Efni Mat Ali  
Aisya Binti Ibrahim

### ABSTRACT

*Studies on cosmetics have received more attention not only from the users, producers, retailers, but also from the authorities who are governing the industry. The impact of the product usage received great attention but the understanding of its development is hardly explored. Regardless of this, from year to year, the sales of cosmetics demonstrated continued growth. The industry nowadays has diversified its marketing approach not only to the traditional female market, but also to male market as well. A survey was conducted involving 622 respondents from the public of the East Coast of Malaysia. The survey was on the effect of cosmetic usage to the skin. The survey adopted a personally administered questionnaire. Specifically, the survey included three constructs such as branding, ingredients, and its effect on skin which are assumed to be among the primary determinants of cosmetics. The study further investigated several demographic profiles as to what extend it influences the usage of cosmetics. Finding of the study using correlation and regression analysis indicated that there was a significant relationship between the identifiable constructs as to the determinant for the purchase and usage of cosmetic.*

**Keywords:** *Cosmetic usage, ingredients, skin problem, branding, consumer*

### Background of Study

Naturally, from the perspective of the need that could either be physiological or sociological, youth tend to place more interest in maintaining their self-image. Frequently, when referring to any image building studies, cosmetics appeared to be linked with the female (Norudin, 2005) and it seems to varies accordingly to the age group, nature of career, and also the geographical factors i.e. where they live. Nowadays, cosmetic is one of the elements that bring attractiveness to human. It is becoming a trend for most people to use cosmetic in their daily life regardless of the generation group they belong. While the usage of cosmetics is at the increasing trend, some users are not concern about its implication to their healthy body such as their effect on the skin and physical outlook. As mentioned by Rodda (2004) some Asians tend to overdo the usage of cosmetics such as the over usage of whitening ritual products. Some users randomly picked products without thoroughly investigating the usefulness and the negative outcome of their usage. It is vital to study the ingredients, understand what they are and what they can do to your skin. Messages sent through the promotion media needed to be further analyzed before purchasing and usage decision is to be upheld. The Environment Working Group (EWG) had found widespread evidences that many cosmetic products in the market were not safe and effective, including one of every eight high-SPF sunscreens that do not protect consumers from UVA radiation at all. Nevertheless, there were products identified as to be offering very good sun protection with ingredients that present minimal health risks to users (EWG, 2007).

Despite countless reminders sent to the public, a large number of users failed to have a comprehensive understanding of the health implications of our exposures to complex mixtures of low doses of industrial compounds and pollutants. Remarkably, federal health standards do not strictly require companies to test their products for safety before they are sold, including nearly all chemicals in sunscreens and other personal care products. In some cases, the federal government approves new chemicals for the market merely using computer models to predict if they are toxic to humans. These are particularly risky methods, given that many studies have shown such

pollutants can cross the placenta to contaminate babies even before the moment of birth. A recent study conducted by EWG revealed that there is an average of 200 chemicals in the umbilical cord blood from 10 newborn babies.

## **Problem Statement**

From public observations and literature reviewing, it is indicated that most of the cosmetic users were not seriously concerned about the effect of its usage to their skin. Most of the users focus on short term results to their appearance rather than the long term effects to the whole body. Several studies indicated that, quite a large number of cosmetic users were threatened with terrible results but they still continue using the products in order to satisfy their egoistic needs. Among the issues that needed to be addressed are: the relationship between the effect of cosmetic usage, the ingredients with cosmetic usage and the concept of branding with the cosmetic usage.

The whole process in cosmetic consumption always involved with knowing the degree level of the consumers' awareness towards the effect of usage. Some consumers do not care whether the cosmetics will give a negative or positive effect. For this circumstance, it seems that many consumers do not know well about the sensitivity of their skin towards the cosmetic products. In another aspect, some consumers do not read the provided information on the cosmetic product ingredients before making a decision to use them. Some scientific terms used in the prescribed ingredients lead to a high level of understanding difficulties for the consumers. Another important consideration is the role of branding which is very much associated with the advertising, environment and beliefs.

## **Objectives**

These are the research objectives:

- i. To investigate the demographic profile of the cosmetic users in Malaysian east coast area.
- ii. To indicate whether the cosmetic users are concerned with the effect of cosmetic usage on their skin, brand and ingredients when using the cosmetic product.
- iii. To determine the factors which influence the cosmetic users when purchasing the products.

## **Scope and Limitation**

This investigation focuses on the population that ranges from the age of 16 and above including both male and female. The groups were categorized into four main age groups which are from 16 to 20 years old, 21 to 30 years old, 31 to 40 years old and above 41 years old. In order to have a good generalization, the nature of study involved a very large population. Three states in the East Coast of Malaysia were considered. The states involved were Terengganu, Pahang and Kelantan.

The independent variables are represented by the effect to the skin, the ingredient on cosmetic, and branding, while the dependent variable was the usage of cosmetic. Among the limitation of our investigation includes: the self-funded project, geographically dispersed population, and the project is scheduled within a 6 month period.

## **Literature Review**

### **Cosmetic usage and the effect on skin**

Most of the issues that often show up are all about the reasons for using cosmetics. One of the expectations for variation in cosmetic usage is the effect on skin. Cosmetic is important for some in order to look stylish and beautiful. This is due to the fact that cosmetic plays a significant role

in the creation of an image or being presentable to the others (DeLong & Bye, 1990) and to find marked differences in the level of social visibility in some of cosmetic product usage (Chao & Schor, 1998). At the same time cosmetic usage will give a big impact to the skin of the users that come in as worthy results or ineffective results. Beauty therapist (Rodda, 2004) revealed that a lot of products in the market are harsh to the skin. Many recent studies have examined the accuracy and fairness of portrayals of women (Baldwin, 1996; Snyder, 1996). Whitening and brightening products is a big business in the Asian beauty industry. Supermarkets and pharmacies carry a wide range of whitening products that promise to take some of skin color away. They also offer a solution for those who suffer from signs of premature ageing such as brown spots, blotches and discoloration of the skin. By overdoing the lightening and whitening process, skin can become sensitive and is eventually damaged (Rodda, 2004).

Some Asian people want to have lighter skin; the cosmetic products become an agent to make this transformation. Light-skinned immigrants in the United States make more money on average than those with darker complexions, and the chief reason appears to be discrimination. (Loller, 1999). Hersch (1999) mentioned that most people know the distortion towards the usage of cosmetic on the skin but they still continue using them. Some of the products will bring good result but some will bring bad impact to the skin. When using the cosmetic product without correct protection, it can make the skin become more sensitive and skin will go defensive, thinking that it is being attacked. If these products are used without sufficient protection i.e. in the form of sunscreens, users will notice more brown patches (Briton, 1999).

Nowadays, most people are more concerned about the appearance on the skin not the effect to the skin. When cosmetics become a product that guarantees the most changes on the skin, it shall become a highly demanded product. It shall take the role of satisfying the human needs. It is now becoming a trend that cosmetics are considered a part of good grooming as they add sparkle to a girl's eyes and glow to her skin. For example, as the cosmetic industries gain its momentum, Greer (1991) discoveries indicated that through the years, more new products had been introduced. This is the result of where some companies have broaden their product line beyond not only skin care but also include woman's hair care, toiletry items for woman and make up items such as eye shadows, eye liner, mascara, lip color, lip glows, blush rouge, blusher and other cosmetic items that can enlighten women's appearance. Thus, aging population will stimulate the development of age-specific makeup and color cosmetic products, particularly in the facial makeup industries (Merchandiser, 1999).

### **Cosmetic brand and cosmetic usage**

There were studies that have been conducted on the relationship between branding of cosmetic and the effect on cosmetic usage. Branding can be in the form of a general name of a product. Through branding it reflects the user perception to the image of the product. Prescott (2006) suggests that brand managers need to keep a close eye on brand-related search terms and adjust paid search and affiliate marketing efforts to keep brand-related searches going to brand sites.

Moreover, brand also influences the decision to buying or not as the brand name play a major role in purchasing decisions. Advertising and packaging build awareness, which shoppers use them to guide through category clutter and says that past experience plays an important role in product selection and brand loyalty. Marketing mix play an important role in order to introduce the brand of the product and increase the brand loyalty. Developing brand loyalty by consistent advertisement which when the products are out there all the time, in TV, radio and print, can develop brand loyalty at a higher level. Closely been associated with branding is the price factor that used to influence the cosmetic purchases. A good price on a name brand can tip the scales on initial use for consumers, who then stayed with the product based on its performance (Ball, 1989). Unlike the earliest use of scents as primary concerned, the need for better image creation through branding greatly mould the development of cosmetic industry (Hulme, 2001).

**Cosmetic usage and the ingredients in the cosmetic products**

Ingredients in cosmetic products play one of the important roles in safety. As mentioned by (EWG, 2007) through a new investigation of 833 name-brand sunscreens, widespread evidences were found that many products on the market are not safe and ineffective, including one of every eight high-SPF sunscreens that do not protect consumers from UVA radiation. They have also identified 135 products that offer very good sun protection with ingredients that present minimal health risks to the users. Repeated studies have found that these nano-ingredients do not penetrate healthy skin, indicating that consumers' exposures would be minimal. Studies on other nano-scale materials have raised concerns about their unique, toxic properties. FDA has failed to approve effective UVA filters available in Europe that, if approved here, could replace nano-scale ingredients (Dodd & Reed, 2007).

Most of the ingredients in the cosmetic products include chemical compound rather than natural elements that will influence the skin of cosmetic users. According to Rodda (2004), the two common active ingredients in skin care and beauty products are AHA (alpha hydroxyl acid) and BHA (beta hydroxyl acid). The present study investigates 42 cosmetic products based on natural ingredients for content of 11 fragrance substances: geraniol, hydroxycitronellal, eugenol, isoeugenol, cinnamic aldehyde, cinnamic alcohol,  $\alpha$ -amylcinnamic aldehyde, eitral, coumarin, and dihydrocoumarin and  $\alpha$ -hexylcinnamic aldehyde. Some of the ingredients are natural and do not have any additional preservatives. The detection of hydroxycitronellal and  $\alpha$ -hexylcinnamic aldehyde in some of the products demonstrates that artificial fragrances, i.e., compounds not yet regarded as natural substances, may be present in products claimed to be based on natural ingredients (Rastogi et al., 1999).

The key ingredients which include plants from Asia such as bamboo, water lily and liquorices will also influence the cosmetic usage (Rodda, 2004). In addition, ingredients that meet the need of the aging baby boomer will continue to have an impact (Challener, 2000). In some countries, there are no strong safety regulations on product ingredients (Rodda, 2004). There is no misrepresentation of ingredients and what they promise to do. Even with given safety regulations, the cosmetic users must still beware of its danger while using the cosmetic products.

**Research Methodology and Design Theoretical Framework**

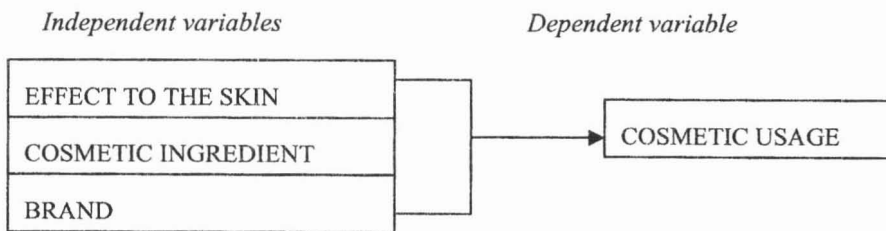


Fig. 3: Theoretical Framework of the Study

The setting of the study is to investigate the profile and the differences of effect of cosmetics usage to skin for the East Coast consumer (Terengganu, Pahang and Kelantan). This research includes independent variables like the effect to the skin, ingredients, and also brand. The dependent variable is cosmetics usage. A descriptive study is undertaken in order to ascertain and to be able to describe the characteristics of the variables of interest in a situation.

## **Hypotheses**

The investigation on association using non-directional hypotheses is as below:

- i. There is a relationship between the cosmetic usage and the effect on the skin
- ii. There is a relationship between the cosmetic usage and the brand of cosmetic product
- iii. There is a relationship between the cosmetic usage and the ingredients in the cosmetic product.

## **Sampling Procedure**

This investigation assumed the population of the study based on the report published by National Census 2000 in Department of Statistics Malaysia at Putrajaya for year 2004. All the main town of the east coast states from Terengganu, Pahang and Kelantan were considered as our data collection point. By excluding the population of those under the age of 16 years old and above 65 years old, it is therefore estimated that there is a population of 526,711 for Terengganu, 745,970 from Pahang and 744,479 for Kelantan. This is the population size. The sampling size determination follows the suggestion by Sudman (1976). The sample size chosen was only in range of 600 respondents.

Convenience technique was used as the sampling method. Respecting the limitation that the elements in the population do not have any probabilities attached to being chosen as a sample subjects, the research worked through the data collection by ensuring reasonable large sample which will be purposively divided and represented.

## **Data Collection and Instrumentation**

Cross-sectional data for the study were collected from the respondents elicited through personally administered questionnaires (PAQ). The data collection activities were confined to a local area and the organizations that were willing and able to assemble groups of employees to respond to the questionnaires at the workplace. Other places involved those at shopping complex, government buildings, and bus stations.

The data gathering activities was in the form of survey using questionnaire which act as the instrument. The questionnaires consist of 5 sections. Section A focused on demographic profiles consists of 8 items. Section B was about the effect to the skin, section C was on the cosmetic ingredient, and section D was on branding. The dependent variable was in section E which was related to cosmetic usage. All the sections consist of 10 questions and each is measured by Likert scale, ranging from point 1 to 5.

## **Finding**

The reliability of measurement is established by testing for both consistency and stability. Reliability analysis provides a strong basis for the measurement. Most of the items measured were found to be highly reliable as indicated by the alpha score of 0.858; 0.652; 0.897; and 0.815. Following the suggestion by Hair et al. (2004), the analysis of data was then carried on.

Table 1: Frequency Table

ITEMS	FREQUENCIES	(%)	ITEMS	FREQUENCIES	(%)
<b>Gender</b>			<b>Marital Status</b>		
Male	217	34.9	Single	434	69.8
female	405	65.1	Married	172	27.7
			Others	16	2.6
<b>State</b>			<b>Occupation</b>		
Terengganu	214	34.4	Government	149	24.0
Pahang	206	33.1	Student	245	39.4
Kelantan	202	32.5	Private	104	16.7
			Housewife	15	2.4
<b>Age</b>			Self-employed	19	3.1
Between 16-20	157	25.2	Others	90	14.5
Between 21-30	315	50.6			
Between 31-40	96	15.4	<b>Education Level</b>		
41 above	54	8.7	SPM	239	38.4
			Diploma	140	22.5
<b>Race</b>			Degree	158	25.4
Malay	551	88.6	Others	85	13.7
Indian	25	4.0			
Chinese	30	4.8	<b>Income Level</b>		
Others	16	2.6	Less than RM1000	366	58.8
			RM1001- RM2000	102	16.4
			RM2001- RM3000	122	19.6
			More than RM3001	32	5.1

Out of 622 total samples, 214 (34.4%) respondents were from Terengganu, 206 (33.1%) from Pahang and 202 (32.5%) from Kelantan. The frequency table (Table 4.11) represents gender which was 34.9% male and 65.1% female. The distribution of age group is displayed that, 25.2% respondents were from the age 16-20 years old, 50.6% of those between 21-30 years old, 15.4% from 31-40 years old, and 8.7%) representing the age group of 41 and above.

Marital status categories were divided into three groups. The representations were mostly single (69.8%), married 27.7%, and while 2.6% were from others. Based on occupation, there are 149 (24.0%) respondents were from the government sectors, 245 (39.4%) were students, 104 (16.7%) were private institutions, 15 (2.4%) were housewives, 19 (3.1%) were self-employed and 90 (14.5%) were others.

The majority which is 58.8% of the sample were from the income category of RM1000 and below. Those within the income bracket of RM 1001 to RM 2000; RM2001 to RM2001 to RM3000; and RM3000 above, respectively representing 16.4 %, 19.6%, and 5.1%. The education levels of the respondents are 239 from SPM, 140 from Diploma, 158 from Degree level and 85 posses other qualification.

The result of the correlation coefficient between the ingredient, effect of skin, and branding, towards cosmetic usage displayed the Pearson value of  $r = 0.411, 0.394, \text{ and } 0.451$  respectively. The above value indicated of a low moderate correlation. However, the result is still significant at the significant value of 0.05. It can be concluded that the correlation results for the entire hypotheses were positively related and supported.

Table 2: Correlations

	Cosmetic usage (E)	Ingredient (B)	Skin (C)	Branding (D)
E	1	.411**	.394 **	.451 **
B		1	.263 **	.337 **
C			1	.168 **
D				1

Note: \*\* p < 0.05

Table 3: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics			
					R Square Change	F Change	Df1	df2
1	.592(a)	.351	.348	.59620	.351	111.376	3	618**

Table 4: Coefficients (a)

Model	In standardized Coefficients		Standardized Coefficients	
	B	Std. Error	Beta	T
1(Constant)	.299	.167		1.793
MEANB	.297	.046	.227	6.435**
MEANC	.274	.033	.279	8.267**
MEAND	.349	.037	.328	9.481**

Dependent Variable: MEANE.

Note: \*\* p < 0.05

The Model Summary displayed the R-Square of 35.1% which was far below the acceptable explanation. However, the independent variables were significant at alpha equals 0.05. Even though all the three predictors were unable to provide a good explanation to the investigation, their involvement as a construct still discovered to be significant. What is needed for future studies is to add a few more other construct so that this prediction would be able to provide a better scenario in the study of cosmetic usage.

**Testing of Differences using ANOVA and T Test for Cosmetic Usage**

Analysis of T-test was conducted to identify the significance differences among the gender profile as to the usage of cosmetic. Table 5 indicated that even though the usage of cosmetic is now becoming common to all gender type, the degree of their involvement varied. Supporting the

traditional approach, female group found to be more attached to the usage of cosmetic as compared to the male group.

Table 5: Independent Samples Test for GENDER

	Levene's Test		t-test for Equality of Means						
	F	Sig.	T	Df	Sig.2-tailed	Mean Difference	Std. Error Difference	95% Conf. Interval	
								Lower	Upper
Equal variances assumed	1.078	.30	-2.225	620	.026	-.138	.062	-.259	-.016

Another testing procedures using ANOVA were conducted to explore the differences of the cosmetic usage throughout the three states. As been displayed in table 6 and table 7, there was a significant difference between the state involved, especially when comparing the states of Pahang and Kelantan. As the case of Terengganu and Pahang; Terengganu and Kelantan, the trend of usage demonstrated a similar pattern.

Table 6: ANOVA

Factor	F
STATE	3.163**
AGE	3.462**
EDUCATION	2.011
INCOME	2.216

Note: \*\* p < 0.05

The impact of education and income found to be weak when associating them with the usage of cosmetic. Both demographic profiles demonstrated a similar pattern of cosmetic usage. With the p-value of 0.085 and 0.111 for education and income as displayed in Table 6, it is therefore concluded that there was no significant difference between education level and income categories of the samples as to the usage of cosmetic.

Table 7: Multiple Comparisons for State

(I) State	(J) State	Mean Difference (I-J)	Std Error	Sig.	95% Confidence Interval	
					Lower	Upper
Terengganu	Pahang	-.085	.072	.466	-.25	.08
	Kelantan	.098	.072	.361	-.07	.27
Pahang	Kelantan	.183**	.073	.033	-.08	.25

Note: \*\* p < 0.05



Table 8: Multiple Comparison Test for Age

(I) Age	( J )	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower	Upper
16-20		.107	.072	.439	-.08	.29
21-30		-.073	.095	.867	-.32	.17
31-40		-.187	.116	.371	-.49	.11
41 and above						
21-30	16-20	-.181	.086	.150	-.40	.04
31-40	16-20	-.294**	.108	.033	-.57	-.02
41 and above	16-20					
31-40	21-30	-.114	.125	.800	-.44	.21
41 and above	21-30					

Note: \*\* p < 0.05

Analyzing further on the status of age group to the usage of cosmetic, the finding revealed that there is a significant difference between the younger groups as to the middle-age group with the p-value of 0.016.

### Conclusion

Nowadays, cosmetic usage becomes a more important part in our daily life. At the same time, cosmetic is widely used as people would feel confident when using it. Moreover, the cosmetic industry becomes more developed because of the increase of demand among the users. The development of the new cosmetic products also influences the cosmetic industry. The advantages of feeling goods, portraying beauty, and satisfying egoistic needs should not be regarded as the elements of justifying the end. Some form of control should be seriously initiated by the authorities to ensure healthy community throughout the nation.

This investigation focused on the effect on to the skin by using cosmetic, depending on three factors. The factors consist of effect to the skin, the ingredient on cosmetic and the brand of cosmetic. The brand name plays a major role in purchasing decisions. It influences the customers' behavior i.e. purchasing decision. There is a need to strike a balance between the healthy living and the need to promote more cosmetic business venturing. Too much regulations imposed to the industry will definitely positioned our cosmetic industry at the least competitive edge. Making it too loose will reflect the poor image of our cosmetic products at the local and international scene. Thus, there is a need to formulate the right mechanism which not only lifting the image of the industry but at the same time ensuring that health of the community keep on shaping the growth of the nation.

Pearson correlation was used to test the relationship between independent variables towards the dependent variable. The empirical results revealed all the independent variables have significant relationships with the dependent variable with weak association for the effect to the skin and the ingredient and moderate association with brand. These findings further provide indication as attempts must be taken to moderate their relationship so that the abuse of marketing efforts, the profit maximization of the industry do not continuously destroy the social values of the users. In fact, earlier findings by Norudin et al. (2006) similarly revealed that the understanding of the relationship between skin and usage of cosmetic is always a concerned in the cosmetic industry.

The researchers would like to suggest that any further study on the usage of cosmetic should consider other variables which were not covered in this research. Among the variables to be considered such as the absence of side effect, product quality, fine features, nice colors and durability of the product. In addition, it should also include other variables such as urban and rural

population, which are expected to demonstrate possible differences among each user. It is also necessary to investigate the role of knowledge in cosmetic through effective education. This assumption maybe used to justify other studies such as work done by Chaou and Schor (1998) which believed that better education will place women in a more important position which will likely demand them to display their positive image in any environment.

## References

- Baldwin, C. (1996). *The distorted reflection: The adaptation of social reproduction theory in cultural analysis of young women's perception of sexuality as a power in advertising images*. Paper presented at Annual Conference of Association of Educators in Mass Communication, California.
- Ball, S. (1989). *Consumer brands preference study*. *Drug store news*. Retrieved December 11, 2007, from [http://findarticles.com/p/articles/mi\\_m3374/is\\_n23\\_v11](http://findarticles.com/p/articles/mi_m3374/is_n23_v11)
- Briton. (1999). *Health effects of overexposure to the sun*. Retrieved December 12, 2007, from <http://www.epa.gov/sunwise/uvandhealth.html>.
- Challener, C. (2000). Multifunctional, product differentiation lead cosmetic ingredients. *Chemical Market Reporter, New York*, 258 (23), 21.
- Chao, A., & Schor, J.B. (1998). Empirical tests of status consumption: Evidence from women's cosmetics. *Journal of Economic Psychology*, 9, 107-131.
- DeLong & Bye. (1990). *Cosmetics appearance*. New York: Global Cosmetics Industries.
- Dodd, C., & Reed, J. (2007). *Fight against skin cancer: Request higher standards for FDA's sunscreen labeling. (Letter from Senators Dodd, Reed, Clinton, Biden, Carper, and Sanders to FDA Commissioner Dr. Andrew von Eschenbach)*. Retrieved June 11, 2007, from <http://dodd.senate.gov>.
- EWG (Environmental Working Group, U.S.). (2007). *Sun wise program: Health effects of overexposure to the sun*. Retrieved June 11, 2007, from <http://www.epa.gov/sunwise/uvandhealth.html>.
- Greer, T.V. (1991). *Cases in marketing - Orientation, analysis and problem (5<sup>th</sup> ed.)*. New York: MacMillan Publishing.
- Hair, J.F., Babin, B., Money, A.H., & Samouel, L.P. (2003). *Essential Of business research methods*. USA: John Wiley & Sons, Inc.
- Hersch, J. (1999). *Government survey on legal immigrants to the United States from around the world and found that those with the lightest skin*. Paper presented at the American Association for the Advancement of Science, San Francisco.
- Hulme, V.A. (2001). *Mary Kay in China: More than makeup*. Washington: The China Business Review.
- Loller, T. (1999). Light-skinned immigrants in United States make more money on average than those with darker complexions, and the chief reason appears to be discrimination for Associated Press writer at Nashville.

- Merchandiser, D. (1999). Mass corners cosmetics. *Bistol*, 39(9), 73.
- Norudin, M. (2005). *Career women: The need for image building as a culture at a work place*. Paper presented at the 2<sup>nd</sup> Asia Pacific Business Conference, Malaysia: Putrajaya.
- Norudin, M., Ariani & Junaidatul, A.F. (2006). *What motivate youths to use cosmetic*. Paper presented at National Seminar on Science Technology & Social Sciences, Pahang: Kuantan.
- Prescott, L.A. (2006, September 18). *A brand-name query on a search engine*. Paper presented at Hitwise.
- Rastogi, S.C. (1999). *Natural ingredients based cosmetics (Content of selected fragrance sensitizers)*. Report by Ministry of Environment and Energy, Nat'l Env'tal Research In'te, Roskilde, Denmark.
- Rodda, K. (2004). *Beauty therapy*. Retrieved October 26, 2004, from [http://www.fda.gov/cder/otcmonographs/Sunscreen/new\\_sunscreen.htm](http://www.fda.gov/cder/otcmonographs/Sunscreen/new_sunscreen.htm).
- Snyder, S. (1996) *Somewhere between average and perfect: Women's magazines and the construction of feminine identity*. Paper presented at the Annual Conference of Association of Educators in Mass Communication, California.
- Sudman. (1976). *Public policy and marketing thought*. Paper presented at the ninth Paul D. Converse Symposium., American Marketing Association

---

NORUDIN MANSOR, DESNIKA EFNI MAT ALI & AISYA BINTI IBRAHIM, Faculty of Business Management, Universiti Teknologi MARA Terengganu, [norudinm@tganu.uitm.edu.my](mailto:norudinm@tganu.uitm.edu.my)