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# **Relationship between Product Factors, Advertising, and Purchase Intention of Halal Cosmetic**

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# ABSTRACT

More customers are aware of Halal products, especially among Muslim customers living in multi-religious societies such as Malaysia. The trend is customers are also becoming more conscious about the permissibility (Halal) of a wide range of products ranging from food, financial and non-financial products, to tourism and health products. This apparently has prompted marketers operating in food, cosmetics, and pharmaceutical products to revise their strategies. The purpose of this paper is to investigate the relationships between five product factors; namely, brand, price, quality, ingredients and labelling and purchase intention of Halal cosmetic and toiletry products. The study also examined the role of advertising in the relationship between product factors and purchase intention. For this purpose, a structured questionnaire was designed based on items adapted from previous studies. Data were collected from 200 adult Muslim respondents using a convenience sampling method. Pearson Correlation and multiple regression analysis were used to test the proposed model. The results indicated that all product factors are significantly correlated with purchase intention. The results further indicate that advertising is a mediator for price-purchase intention relationship, but not a mediator to other product factors-purchase intention relationships. This study provides insights into how consumers behave in purchasing Halal products, given five product factors of brand, price, quality, ingredients and labelling. It is argued in this research that the presence of advertising may not change the intention to purchase Halal products but price may influence purchase intention.

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## INTRODUCTION

The Halal industry has evolved from merely focusing on food to various other industries spanning a wider area of lifestyle, and driving demands in other non-food areas like consumer products such as cosmetics and toiletries, Islamic finances, and tourism (Hanzee & Ramezanee, 2011). Research by WHF shows that in 2010, the Halal Food Industry stood at USD641 billion and it is now estimated to worth USD661 billion. Overall, the combination of Halal food, pharmaceuticals, cosmetics and travel is estimated to worth over USD2.3 trillion. In addition, the Halal industries are growing at 15-20% annually (KasehDia Sdn. Bhd., 2011). Therefore, the Muslim consumer market is evidently a lucrative market with plenty of opportunities for market growth.

One of the promising areas in the Halal industry is the cosmetic market. It is estimated that the current size of the Halal cosmetic market ranges from US\$5-14 billion, with a growing number of consumers concerned with the Halal issues of the cosmetics they consume (Hunter, 2012; Ireland & Rajabzadeh, 2011). Halal generally refers to things or actions that are permissible under the Shariah (Islamic) law. In the scope of Halal cosmetics, the concept covers all aspects of production, including sourcing of Halal ingredients and usage of permissible substances - all must be manufactured, stored, packaged, and delivered in conformity with the Shariah requirements. Islam requires Muslims to adhere to its specific guidelines and principles for the consumption of goods and

services; thus, Muslim consumers have a high demand for Halal products that comply with the Islamic approach (Al-Khatib et al., 1995; Rice, 1999). Consumable materials range from food, drinks, cosmetics, medicine, detergents, soaps, shampoo, and deodorants to antiperspirants for human beings, and feed for animals. In order for them to be considered religiously lawful and thus certified as Halal, the consumable products must fulfil the following requirements (Halal Industry Development Corporation, 2012): (1) do not contain any parts or products of non-Halal animals (animals which are not allowed to be eaten by Muslims), (2) do not contain any parts or products of Halal animals (such as cattle, goats, sheep, and poultry) that are not slaughtered according to Islamic law (Shariah), (3) do not contain any ingredients that are Najs (filthy or unclean) according to the Islamic law, (4) are safe and not harmful (do not contain physical, chemical, or biological/ microbial hazards), (5) are not prepared, processed or manufactured using equipment that is contaminated with things that are regarded as Najs according to the Shariah, (6) ingredients that do not contain any human parts or their derivates, (7) during its preparation, processing, packaging, storage or transportation, the products are physically separated from any other product that does not meet the requirements stated above or any other things that have been decreed as Najs by the Shariah. Jamal Abdul Nassir and Nur Shahira (2010) stated that Halal covers wide areas of consideration such as purchase intention, source of income (Regenstein,

Chaudry, & Regenstein, 2003), attitude towards advertisement, as well as attitude towards product and purchase intention (Maheswaran & Sternthal, 1990). The realm of Halal may extend to all consumables such as toiletries, pharmaceutical, cosmetics, and services including finance (Lada *et al.*, 2009). The fact of the matter is that Muslim consumers are very similar to any other consumer segments, demanding healthy and quality products, which must also conform to the Shariah requirements (Al-Harran & Low, 2008).

The study on Halal non-food can be categorized under product attributes (e.g., ingredients), and marketing (e.g., logo and labelling) (e.g., Rajagopal et al., 2011; Swidi et al., 2010). Meanwhile, the use of some typical ingredients such as gelatine, alcohol, placenta, lard, and collagen is ubiquitous within the mainstream cosmetics industry mainly due to their wide availability and in some cases, cost effectiveness (Kamaruzzaman, 2009; Murray, 2012). Simon (2007) stated that specific demand for Halal personal care products is being driven by increased consumers' knowledge of the ingredients used in the formulation of such products and the way they are produced. Halal cosmetics may contain animal-derived ingredients, but these have to be prepared according to the Islamic law, specifically in regards to the procedures applied for killing and preparing of the animals.

Other than the issue of ingredients, there is another issue regarding the Halal logo or labelling. Norhayati and Asmat Nizam (2010) stated that proper procedures need to be taken in order for the goods or services to be awarded the Halal certification. Hence, the Halal logo or label cannot be taken lightly. In other words, the Halal label needs to be certified by a credible authority. In Malaysia, for example, JAKIM has the authority to grant the Halal certification for food and services through its logo or sticker (SIRIM, 2004). According to Al-Harran and Low (2008), the Halal label should not only be descriptive, but also be clear and meaningful to the consumers.

In line with the growing interest in the marketing of Halal products, this study was designed to provide insights into consumers' behaviour regarding Halal products. In more specific, the objectives of this study are:

- 1. To determine the relationship between product factors (brand, price, quality, ingredients and labelling) and purchase intention.
- 2. To examine the effects of advertising on the relationship between product factors and purchase intention.

#### Brand-purchase Intention Relationship

The relationship between brand and purchase intention has been investigated extensively. For example, Rajagopal (2006) acknowledged that brand associations influence the "evaluation of alternatives" stage in basic consumer buying behaviour models. Meanwhile, Woodside and Wilson (1985) found that a relationship exists between the level of brand awareness and the purchase decision, that is, the more easily the consumers recall the brand in an unaided recall situation, the higher their purchase intention and the more likely the purchase of the brand. In similar vein, Keller (1993) found that consumers purchase only familiar, well-established brands because they do not always spend a great deal of time or cognitive effort in making purchase decisions and often try to minimize decisionmaking. Some previous research examining attitude showed that a brand significantly impacts intention to buy that particular brand (Brown & Stayman, 1992; Homer, 1990; MacKenzie et al., 1986), and there is a significant positive relationship between brand attitude and intention to buy. Laroche et al. (1996) found that brand familiarity positively influenced shoppers' purchase intention while examining traditional retail stores. Akaah and Kargaonkar (1998) found that established manufacturer name greatly enhances the willingness to purchase packages by direct-marketing means. Thus, the following hypothesis is proposed:

H1*a*: Brand has significant influence on purchase intention of Halal products.

#### Price-purchase Intention Relationship

Price-purchase intention relationship has been studied over many years. Among other Karlsson *et al.* (2005) found that consumers were willing to make an effort to purchase online in order to obtain price savings. This may be balanced by the fact that the internet reduces search costs (time and effort) before purchase. Ehrenberg *et al.* (1997) noted that consumers have their individual price perceptions and will buy products that are priced within their portfolios of prices that they are willing to pay for products (cited in Summers *et al.*, 2006). In a study by Helegeson and Beatty (1985), price was found to represent extrinsic cues, and it is also one of the most important kinds of information consumers use when making a purchase decision, and accounting for 40 per cent of their information search. Lichtenstein *et al.* (1993) elucidated that the price cue, however, is likely to be multidimensional, taking on a positive or negative role in consumers' decision making, that is, price itself facilitates or debilitates possibility of purchase. Thus, the following hypothesis is proposed:

H1*b*: Price has significant influence on purchase intention of Halal product.

# Quality-purchase Intention Relationship

Hellier et al. (2003) found that customerpurchase intention studies highlighted the role of factors such as service quality, equity and value, customer satisfaction, past loyalty, expected switching cost and brand preference. Huddleston et al. (2001), Woodruff et al. (1998), and Mussey (1995) stated that consumers are buying products based on the price and quality, and to a lesser degree, on the country of origin. In general, when evaluating certain products, consumers use intrinsic cues such as style or material, as well as extrinsic cues such as price or brand, as indicators of quality. As the concept of Halal is related to the quality of product, the following hypothesis is proposed:

H1*c*: Quality has significant influence on purchase intention of Halal product.

# Ingredients-purchase Intentions Relationship

Not many research studied ingredientspurchase intention relationship. Nevertheless, there are few that have highlighted ingredients and purchase intention in the research. For example, Johri and Sahasakmontri (1998) stated ingredient-purchase intention relationship in the context of skin/hair care product purchases, i.e. consumers with high health consciousness consider whether a product is safe for the skin and body; therefore, they may be more seriously concerned with the ingredients used to make the products than those with low health consciousness (cited in Hee & Jae, 2011). In another study, Todd (2004) states that consumption of personal care products is a purchasing behaviour that satisfies one's needs for beauty and care of one's general appearance. He also found that consumers' values and attitudes, environmental consciousness, and appearance consciousness are important in predicting consumers' attitudes toward organic personal care products. As of date, no known study has investigated the relationship between ingredients and purchase intention. Once again, because the concept of Halal covers every aspect of a product, it is assumed that the ingredients of a product are significantly related to purchase intention of Halal products. Thus, the following hypothesis is proposed:

H1*d*: Ingredients has significant influence on purchase intention of Halal product.

#### Labelling (Halal logo)-purchase Intention Relationship

Having a Halal logo or certificate in today's globalized world is a must in order to cater for all Muslim needs (Jamal Abdul Nassir & Nur Shahira, 2010). The Halal certification is the most important indicator of Halal in Malaysia because by having a Halal logo or certification means a product has been certified as *halal* by Malaysian certification bodies of Halal (e.g. JAKIM/JAIN/MAIN). Hence, it is assumed that labelling (Halal logo) is significantly related to the purchase intention of Halal products. Thus, the following hypothesis is proposed:

H1*e*: Labelling (Halal logo) has significant influence on purchase intention of Halal product.

#### Mediating the Role of Advertising

Park and Stoel (2005) found that prior exposure to advertising is one of the sources to retrieve knowledge from memory to gather internal information in handling uncertainties about the potential positive or negative consequences as the perceived risk of a purchase decision increases. For example, Brassington and Pettitt (2003), Erdogan and Baker (2000) and Redenbach (2000) concluded that brands are sensitive to the communication and anchors which catalyze consumer behaviour (as cited in Rajagopal, 2006). Furthermore, in terms of quality, Macdonald and Sharp (2003) found that consumers' perception of quality is sometimes based on the belief that "if he/she is familiar with the brand, the organisation must have spent heavily on advertising.

Economic signalling theory suggests that consumers may perceive repetition as a cue to the quality of an unfamiliar brand (Kirmani, 1997).

This study framed advertising as a mediator variable. This is due to the positive/ negative role of advertising in affecting consumers purchase intention. Thus, the following hypotheses are proposed:

H2a: Advertising mediates the relationship between brand and purchase intention.

H2b: Advertising mediates the relationship between price and purchase intention.

H2c: Advertising mediates the relationship between quality and purchase intention.

H2*d*: Advertising mediates the relationship between ingredients and purchase intention.

H2e: Advertising mediates the relationship between labelling and purchase intention.

# MATERIALS AND METHOD

This study consists of three variables; independent variables, mediator variable and dependent variable. Independent variables in this study refer to the five product factors; namely, brand, price, quality, ingredients and labelling. Mediator variable refers to advertising, while dependent variable refers to purchase intention of Halal products. A total of 200 respondents participated in this study. All the respondents are Malaysian Muslims who were surveyed via meeting in person or in group and also via internet like e-mail and social networking. This study uses convenience sampling. The participants were given a questionnaire each to complete. The questionnaire is divided into two sections. Section A contains 32 items that measured Brand, Price, Quality, Ingredients, Labelling, Advertising and Purchase Intention. These items were measured using a Likert scale ranging from 1=strongly disagree, 2=disagree, 3=quite disagree, 4=neutral, 5=quite agree, 6=agree and 7=strongly agree. Section B assessed demographic characteristics of each respondent. It includes questions on the respective respondent's gender, age, status, highest education level, occupation and gross monthly income. The questions were adapted from Petrovici and Marinov (2007), Jamal Abdul Nassir and Nur Shahira (2010), Radder and Wei (2008), Ruparelia et al. (2010), and Hanzaee and Aghasibeig (2010).

## **RESULTS AND DISCUSSIONS**

# Product Factors-Purchase Intention Relationship

In order to examine the relationships between product factors (brand, price, quality, ingredients, labelling) and purchase intention, data were analyzed using Pearson Correlation Analysis. Preliminary analyses were performed to ensure no violation of the assumptions of normality, linearity and homoscedasticity. The results are shown in Table 1. As can be seen in Table 1, all the relationships were found to be significant with p-value below 0.01.

#### TABLE 1

Pearson correlation analysis on product factorspurchase intention relationship

Product Factors	Purchase Intention
Brand	550**
Price	.272**
Quality	.390**
Ingredient	556**
Labelling	.479**

\*\* Correlation is significant at 0.01 level

## Brand-Purchase Intention Relationship

Based on Table 1, there is a strong but negative correlation between brand and purchase intention (r=-.550, p<0.01). This significant relationship (r=-.550) shows that respondents were quite firm in prioritizing Halal over brand and not intending to purchase if the product is not Halal even though they have high regards for the brand.

#### Price-Purchase Intention Relationship

As for the relationship between price and purchase intention, the results showed that there is a small, positive correlation between price and purchase intention (r=.272, p<0.01), with higher price associated with higher intent to purchase. This may indicate that consumers do not mind paying more as long as the product is Halal. However, since the correlation is rather small (r=.272), it can be concluded that consumers do not mind paying more but the price must be reasonable as well. In other words, if the price is too high, customers will not have the intention to purchase it even if the product is Halal.



Fig.1. Research Framework

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#### Quality-Purchase Intention Relationship

For the relationship between quality and purchase intention, there is a medium, positive correlation between quality and purchase intention (r=.390, p<0.01), whereby higher quality is associated with higher intent to purchase. This may indicate that even though price should play a role in purchase decision making, it cannot be denied that quality is always expected from every product bought by consumers. The medium relationship (r=.390) indicates that consumers look upon reasonable quality when they intend to buy Halal product.

#### Ingredients-Purchase Intention Relationship

There is a strong but negative correlation between ingredients and purchase intention (r=-.556, p<0.01), suggesting that higher concerns over ingredients are related with lower intent to purchase. The pattern of the results implies that consumers who are concerned with a product's ingredients will be less likely to purchase that product if they find the ingredients to be doubtful (which will become more obvious when the consumers are more concerned). This conclusion is strengthened by the fact that the correlation is significant (r=-.556).

# Labelling (Halal logo)-Purchase Intention Relationship

Finally, there is a medium, positive correlation between labelling and purchase intention (r=.479, p<0.01), with higher confidence in labelling correlated with higher intent to purchase. The medium

correlation (r=.479) indicates that Halal logo or labelling is not mandatory to consumers when they intend to purchase cosmetics or toiletries products. Instead, it is seen as a convincing factor rather than a determinant for purchasing a product. It can be concluded that if consumers are confident that the product is Halal based on the Halal logo and if they feel that the Halal logo is genuine, they will have higher intention to buy it.

# Mediating Role of Advertising

In order to determine whether advertising is a mediator or not, the causal approach by Baron and Kenny is used. Significance is determined when null hypothesis, coefficient equal to zero ( $\beta=0$ ), is rejected so coefficient is not equal to zero ( $\beta \neq 0$ ). Non significance is determined when the null hypothesis, coefficient equal to zero ( $\beta=0$ ), failed to reject so the coefficient is equal to zero ( $\beta=0$ ). Since the coefficient is significant at 0.05 level, the null hypothesis will be rejected if p<0.05, which means that it is different from zero ( $\beta \neq 0$ ). In brief, if the coefficient for a path is significant, the p-value should be less than 0.05 and path coefficient is therefore different from zero (i.e. not zero). Table 2 summarizes the coefficient and p-value for total effect of the independent variable, X, on the dependent variable, Y (path c), the effect of the independent variable, X, on the mediator variable, M (path a), the effect of the mediator variable, M, on the dependent variable, Y (path b) and the direct effect of the independent variable, X, on the dependent variable, Y,

purchase intentio	in of fluidi cosmetics			
			Relationship	
Indonandant	Independent	Purchase	Advertising on	Purchase Intention on
Independent Variables	Variable on	Intention on	Independent	Independent Variable
variables	Purchase Intention	Advertising	Variable	through Advertising
	(path c)	(path a)	(path b)	(path c')
	t	t	t	t
Brand	-2.546*	-0.403	0.227*	-2.455
Price	0.351*	0.444*	0.211*	0.257
Quality	0.353*	0.547*	0.121	0.287
Ingredients	-2.151*	0.181	0.281*	-2.201
Labelling	0.172*	0.177*	0.088	0.156

TABLE 2

Regression evaluating advertising as a possible mediator of the relationship between product factors and purchase intention of Halal cosmetics

\*Coefficient is significant at 0.05 level

through mediator variable, M (path c). In the causal approach by Baron and Kenny, variable M is considered a mediator if (1) X significantly predicts Y (i.e.,  $c \neq 0$ ), (2) X significantly predicts M (i.e.,  $a \neq 0$ ), and (3) M significantly predicts Y controlling for X (i.e.,  $b \neq 0$ ) (Preacher & Hayes, 2004). As shown in Table 2, advertising is not a mediator in brand-purchase intention relationship, quality-purchase intention relationship, ingredients-purchase intention relationship and labelling-purchase intention relationship because either path a or path b is not significant. However, advertising is a mediator only for price-purchase intention relationship because all paths are significant. Thus, H2a, H2c, H2d, and H2e are not supported and only H2b is supported.

In bootstrapping method, advertising is considered a mediator if zero is not within the lower and the upper level of confidence interval. As shown in Table 3, advertising is not a mediator in the brand-purchase intention relationship, quality-purchase intention relationship, ingredients-purchase intention relationship and labelling-purchase intention relationship because the 95% confidence interval (CI) contains zero. It means that zero is within the interval. Thus, the null hypothesis failed to be rejected. Advertising only mediates the relationship between price and purchase intention because its 95% CI does not contain zero. In other words, it is different from zero, so the null hypothesis is rejected.

It can be observed that both the causal method by Baron and Kenny, and the bootstrapping method indicate the same result for the mediating role of advertising. The results of this study show that advertising only mediates the pricepurchase intention relationship. This means that advertising influences the relationship between the two variables. Earlier in the findings, price is positively related with purchase intention, which means that the higher the price, the more a consumer has intention to buy the product because

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Bootstrapping method in evaluating advertising as a possible mediator of the relationship between product factors and purchase intention of Halal cosmetics

	95% Confidence Interval	
	Lower	Upper
Advertising on Brand-Purchase Intention	3494	.0787
Advertising on Price-Purchase Intention	.0361	.1928
Advertising on Quality-Purchase Intention	0099	.1505
Advertising on Ingredient-Purchase Intention	1565	.2781
Advertising on Labelling-Purchase Intention	0043	.0407

he does not mind paying more as long as it is *halal*. However, assuming that the consumer saw an advertisement about the price of the product, which is more than what he can afford, it is most likely that he will be influenced to change his earlier intention to buy the product after watching the advertisement.

The results indicate that Muslim consumers in Malaysia are still concerned with the Halal status of these products when purchasing them. Regardless of brand names, Muslim consumers will generally purchase products that are certified as halal. Hence, it is recommended that producers of cosmetics and personal care products apply for a halal certification for their products if they wish to increase their Muslim consumers' confidence in their products. Producers who have successfully acquired the Halal certification should clearly indicate it on their labels. In addition, the ingredients of a particular product should be specifically indicated on the labels for the convenience of consumers, who may not only be scrutinizing for religious purposes, but also for health reasons.

In addition, producers of cosmetics and personal care should also offer their halal certified products at competitive price rates. Based on the results of this study, Muslim consumers are still price sensitive even though they realize the importance of seeking halal certified products. In the market, there are numerous brands of cosmetics and personal care products which are halal certified. As such, Muslim consumers will still have the choices to switch products when they think it is necessary. Since the study has revealed the significant role of advertisement in the purchase intention of these halal products in terms of pricing, it is recommended that producers who put higher prices for their halal certified products to also indicate in the advertisement the added values or the advantages of their products, which will further justify the high monetary value that consumers will be exchanging for when purchasing the higher price products.

## CONCLUSION

In light of the increased consumer attention and interest on halal products, this study

investigated the relationship between product factors and intention to purchase Halal cosmetic products. Five product factors were examined, namely, brand, price, quality, ingredients and labelling. There are significant and positive correlations between each product factor and intention to purchase Halal products, except for brand. In contrast to some previous studies which found a positive relationship between brand and purchase intention, our study found that brand and purchase intention of halal products have a negative relationship. This result indicates that customers who intend to purchase halal cosmetics will prioritize 'halalness' over brand. Hence, price that is correlated positively with the intention to purchase Halal products may indicate that consumers are willing to pay higher price for these Halal products. The positive correlation between quality and intention to purchase Halal products indicates that higher quality is associated with a higher intent to purchase. Consumers always look forward to buy quality Halal products. Thus, better quality will lead to a higher intent to purchase Halal products. On the contrary, the negative correlation between ingredients and purchase intention may indicate that if consumers have doubts about the Halalness of a product's ingredients, they may not purchase that product. The positive correlation between labelling and purchase intention indicates that as customers have higher confident in labelling of the halal products, they will have higher intention to purchase the Halal products. Consumers who can differentiate and are

confident about the genuineness of the Halal logo tend to have higher intent to purchase the products. This study also sheds some light on the role of advertising when consumer intends to buy Halal products after considering the product factors given earlier. It was concluded that advertising did not mediate all the product factorspurchase intention relationships except for the relationship between price and purchase intention.

#### REFERENCES

- Al-Harran, S., & Low, P. (2008). Marketing of halal products: the way forward. *Halal Journal*.
- Al-Khatib, J. A., Dobie, K., & Vitell, S. J. (1995). Consumer ethics in developing countries: an empirical investigation. *Journal of European Marketing*, 4, 87-109.
- Archibald, R. B., Haulman C. A., & Moody C. E., (1983). Quality, Price, Advertising and Published Quality Ratings. *Journal of Consumer Research*, 9, 347-356.
- Baldinger, A., & Robinson, J. (1996). Brand loyalty: the link between attitude and behaviour. *Journal* of Advertising Research, 36(6), 22-35.
- Baron, R. M., & Kenny, D. A. (1986). The mediator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal* of Personality and Social Psychology, 51(6), 1173-1182.
- Biehal, G., Stephens, D., & Curlo, E. (1992). Attitude toward the ad and brand choice. *Journal of Advertising*, 21(3), 19-36.
- Bollen, K. A., & Stine, R. (1990). Direct and indirect effects: Classical and bootstrap estimates of variability. *Sociological Methodology*, 20, 115-140.

- Boronico, J. S. (1999). Reliability-constrained pricing, capacity, and quality: an illustration of economic concepts to postal services. *Production and Operations Management*, 8(1), 92-107.
- Brown, S. P., & Stayman, D. M. (1992). Antecedents and consequences of attitude toward the ad: a meta-analysis. *Journal of Consumer Research*, 19(2), 34-51.
- Dawar, N., & Parker, P. (1994). Marketing universals: consumers' use of brand name, price, physical appearance, and retailer reputation as signals of product quality. *Journal of Marketing*, 58(2), 81-95.
- Feick, L. F., & Price, L. L. (1987). The market maven: a diffuser of marketplace information. *Journal of Marketing*, 51, 83-97.
- Grissom, R. J. (2000). Heterogeneity of variance in clinical data. *Journal of Consulting and Clinical Psychology*, 68, 155-165.
- Hair, J. F., Anderson, R. E., Tatham R. L., & Black,
  W. C. (1998). *Multivariate data analysis* (5<sup>th</sup> Ed).
  New Jersey: Prentice Hall Inc.
- Halal Industry Development. (2012). Retrieved March 24, 2012, from http://www.hdcglobal.com
- Hanzaee, K. H., & Aghasibeig, S. (2010). Iranian generation Y female market segmentation. *Journal of Islamic Marketing*, 1(2), 165-176. doi: 10.1108/17590831011055897
- Hanzae, K. H., & Ramezani, M. R. (2011). Intention to Halal Products in The World Markets. *Interdisciplinary Journal of Research in Business*, 1(5), 01-07.
- Hayes, A. F. (2009). Beyond Baron and Kenny: Statistical mediation analysis in the new millennium. *Communication Monographs*, 76(4), 408-420. Retrieved from http://www.informaworld. com/smpp/content~db=all~content=a9172857 20~tab=citation

- Hee, Y. K., & Jae, E. C. (2011). Consumer purchase intention for organic personal care products. *Journal of Consumer Marketing*, 28(1), 40-47. Doi: 10.1108/07363761111101930
- Helegeson, J. G., & Beatty, S. E. (1985). An information processing perspective on the internalization of the price stimuli. *Advances in Consumer Research*, 12, 91-106.
- Hellier, P. K., Geursen, G. M., & Carr, R. A. (2003). Customer repurchase intention: a general structural equation model. *European Journal of Marketing*, 37(1), 762-800.
- Hoaglin, D. C., Mosteller, F., & Tukey, J. W. (1983). Understanding robust and exploratory data analysis. New York: Wiley.
- Homer, P. M. (1990). The mediating role of attitude toward the ad: some additional evidence. *Journal* of Marketing Research, 27(2), 78-86.
- Howell, D. C. (2007). Statistical methods for psychology (6<sup>th</sup> ed.). Belmont, CA: Thomson Wadsworth.
- Huddleston, P., Good, L. K., & Stoel, L. (2001). Consumer ethnocentrism, product necessity and Polish consumers perception of quality. *International Journal of Retail & Distribution Management*, 29(5), 236-246.
- Hunter, M. (2012, March). The emerging Halal cosmetic and personal care market. *Personal Care*, p.
- Ireland, J., & Rajabzadeh, S. A. (2011). UAE consumer concerns about halal products. *Journal* of Islamic Marketing, 2(3), 274 – 283.
- Jamal Abdul Nassir Shaari., & Nur Shahira Mohd Arifin. (2010). Dimensions of halal purchase intention: a preliminary study. *International Review of Business Research Paper*, 6(4), 444-456.

- Judd, C. M., & Kenny, D. A. (1981). Process analysis: Estimating mediation in treatment evaluations. *Evaluation Review*, 5, 602-619.
- Karlsson, T., Kuttainen, C., Pitt, L., & Spyropoulou, S. (2005). Price as a variable in online consumer trade-offs. *Marketing Intelligence & Planning*, 23(4), 350-358. Doi: 10.1108/02634500510603456
- KasehDia Consulting. (2011). The 6<sup>th</sup> World Halal Forum, 4-5 April 2011, Post Event Report.
- Kaufman, J. S., MacLehose R. F., & Kaufman, S. (2004). A further critique of the analytic strategy of adjusting for covariates to identify biologic mediation. *Epidemiology Innovations and Perspectives*, 1(4).
- Keller, K. L. (1993). Conceptualizing, measuring and managing customer-based brand equity. *Journal* of Marketing, 57, 1-22.
- Kenny, D. A. (2009). Mediation. Retrieved from http://www.davidakenny.net/cm/ mediate. htm#ST.
- Kirmani, A. (1997). Advertising repetition as a signal of quality: If it advertised so much, something must be wrong. *Journal of Advertising*, 26(3), 77-86.
- Kotler, P., & Armstrong, G. (2004). Principles of Marketing. Upper Saddle River, NJ: Pearson Prentice-Hall.
- Lada, S., Tanakinjal, G. H., & Hanudin Amin (2009). Predicting intention to choose Halal products using theory of reasoned action. *International Journal of Islamic and Middle Eastern Finance* and Management, 2(1), 66-76.
- Lapierre, J., Filiatrault, P. & Chebat, J.-C. (1999). Value strategy rather than quality strategy: a case of business-to-business professional services. *Journal of Business Research*, 45(2), 235-46.

- Laroche, M., & Sadokierski, R. W. (1994). Role of confidence in a multi-brand model of intentions for a high involvement service. *Journal of Business Research*, 29(1), 1-12.
- Laroche, N., Kim, C., & Zhou, L. (1996). Brand familiarity and confidence as determinants of purchase intention: an empirical test in a multiple brand context. *Journal of Business Research*, 37(10), 115-20.
- Lichtenstein, D. R., Ridgway, N. M., & Netemeyer, R. G. (1993). Price perceptions and consumer shopping behavior: a field study. *Journal of Marketing Research*, 30, 243-257.
- Lin, M. Y., & Chang, L. H. (2003). Determinants of habitual behavior for national and leading brands in China. *Journal of Product & Brand Management*, 12, 94-107.
- Macdonald, E., & Sharp, B. (2003, January). Management perceptions of the importance of brand awareness as an indication of advertising effectiveness. *Marketing Bulletin*, pp. 1-11.
- MacKenzie, S. B., Lutz, R. J., & Belch, G. E. (1986). The role of attitude toward the ad as a mediator of advertising effectiveness: a test of competing explanations. *Journal of Marketing Research*, 23(2), 130-43.
- MacKinnon, D. P. (2008). *Introduction to Statistical Mediation Analysis*. New York: Erlbaum.
- MacKinnon, D. P., Lockwood, C. M., Hoffman, J. M., West, S. G., & Sheets, V. (2002). A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods*, 7, 83-104.
- Marquardt, R. A., & McGann A. F. (1975). Does advertising communicate product quality to consumers? Some evidence from Consumer Reports. *Journal of Advertising*, *4*, 27-31.

- Mason, R. S. (2007). Price and product quality assessment. European Journal of Marketing, 8(1), 29-41.
- Melati Mohd Ariff. (2010). Consumers Need More Info on Halal issues. Retrieved from http://www. halaljournal.com/article/4254/consumers-needmore-info-on-halal-issues.
- Nelson, P. (1974). Advertising as information. Journal of Political Economy, 82(4), 729-754.
- Norhayati Zakaria., & Asmat Nizam Abdul Talib (2010). Applying Islamic market-oriented cultural model to sensitize strategies towards global customers, competitors, and environment. *Journal of Islamic Marketing 1*(1), 51-62. Doi: 10.1108/175908310110 26222.
- Olson, J. C. (1977). Price as an informational cue: Effects in product evaluation. In A. G. Woodside, J. N., Sheth, & P. D. Bennet (Eds.), *Consumer and industrial buying behavior* (pp. 267-860). New York, NY: North Holland Publishing Company.
- Pallant, J. (2001). SPSS survival manual. Australia: Allen & Unwin.
- Park, J., & Stoel, L. (2005). Effect of brand familiarity, experience and information on online apparel purchase. *International Journal of Retail & Distribution Management*, 33(2), 148-160. Doi: 10.1108/09590550510581476.
- Pearl, J. (2000). Causality: Models, Reasoning and Inference (2<sup>nd</sup> ed.). (2009). Cambridge University Press.
- Pearl, J. (2001). Direct and indirect effects. Proceedings of the Seventeenth Conference on Uncertainty in Artificial Intelligence, Morgan Kaufmann, 411–420.
- Petrovici, D., & Marinov, M. (2007). Determinants and antecedents of general attitudes towards advertising. *European Journal* of Marketing, 41 (3/4), 307-326. Doi: 10.1108/03090560710728354.

- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior Research Methods, Instruments, & Computers, 36*(4), 717-731.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods*, 40(3), 879-891.
- Radder, L., & Wei, H. (2008). High involvement and low involvement products a comparison of brand awareness among students at a South African University. *Journal of fashion Marketing and Management*, 12(2), 232-243. Doi: 10.1108/13612020810874908
- Rajagopal. (2006). Brand excellence: measuring the impact of advertising and brand personality on buying decisions. *Measuring Business Excellence*, 10(3), 56-65. Doi: 10.1108/13683040610685793
- Shambavi Rajagopal, Sitalakshmi Ramanan, Ramanan Visvanathan, & Subhadra Satapathy. (2011).
  Halal certification: implication for marketers in UAE. Journal of Islamic Marketing, 2(2), 138 – 153.
- Rice, G. (1999). The Islamic work ethics. Journal of Business Ethics, 18(4), 345-58.
- Robins, J. M., & Greenland, S. (1992). Identifiability and exchangeability for direct and indirect effects. *Epidemiology*, *3*(2), 43–55.
- Ruparelia, N., White, L., Hughes, K. (2010). Drivers of brand trust in internet retailing. *Journal of Product & Brand Management 19*(4), 250–260. doi: 10.1108/10610421011059577
- Sebastianelli, R., & Nabil Tamimi (2002). How product quality dimensions relate to defining quality. *International Journal of Quality & Reliability Management, 19*(4), 442-453.
- Shimp, T. A. (2010). Integrated marketing communication in advertising and promotion.

South Carolina: South-Western Cengage Learning.

- Simon, P. (2007). Halal cosmetics spell big opportunities. Retrieved from http://www. cosmeticsdesign.com/Market-Trends/Halalcosmetics-spell-big-opportunities.
- Stone, C. A., & Sobel, M. E. (1990). The robustness of total indirect effects in covariance structure models estimated with maximum likelihood. *Psychometrika*, 55, 337-352.
- Summers T. A., Bellaeau, B. D., & Xu, Y. (2006). Predicting purchase intention of a controversial luxury apparel product. *Journal of Fashion Marketing and Management*, *10*(4), 405-419. doi: 10.1108/13612020610701947
- Swidi, A, Wie, C. Hassan, M. G., Al Hosam, A., & Kassim, A.W.M. (2010. The mainstream cosmetics industry in Malaysia and the emergence, growth, and prospects of halal cosmetics. In The *Third International Conference* on International Studies (ICIS 2010), 1-2 December 2010, 1-20. ISBN 9789832078456.
- Tabachnick, B. G., & Fidell, L. S. (1996). Using multivariate statistics (3<sup>rd</sup> ed.). New York: HarperCollins.

- Tabachnick, B. G., & Fidell, L. S. (2007). Using multivariate statistics (5<sup>th</sup> ed.). Boston: Allyn and Bacon.
- Tse, A. C. B. (2001). How much more are consumers willing to pay for a higher level of service? A preliminary survey. *Journal of Services Marketing*, 15(1), 11-17.
- Tukey, J. W. (1977). *Exploratory data analysis*. Reading, MA: Addison-Wesley.
- Weisberg, J., Te'eni, D., & Arman, L. (2011). Past purchase and intention to purchase in e-commerce. *Internet Research*, 21(1), 82-96. doi: 10.1108/10662241111104893.
- Williams, J., & MacKinnon, D. P. (2008). Resampling and distribution of the product methods for testing indirect effects in complex models. *Structural Equation Modeling*, 15, 23-51.
- Woodside, A. G., & Wilson, E. J. (1985). Effects of consumer awareness of brand advertising on preference. *Journal of Advertising Research*. 25, 41-8.
- Yoo, B., Donthu, N., & Lee, S. (2000). An examination of selected marketing mix elements and brand equity. *Journal of the Academy of Marketing Science*, 28, 197-213.