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**THE ANTECEDENTS OF CONSUMER INTENTION TO PURCHASE HALAL
COSMETIC PRODUCTS IN PAKISTAN: USING BEHAVIORAL REASONING
THEORY**

By



**SAQIB ALI
99197**

UUM
Universiti Utara Malaysia

**Thesis submitted to
Othman Yeop Abdullah Graduate School of Business,
University Utara Malaysia,
in Fulfillment of the Requirement for the Degree of Doctor of Philosophy**



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: **Assoc. Prof. Dr. Mohammad Ismail (UMK)**

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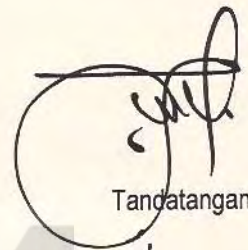
Tarikh: **11 April 2017**
(Date)

Nama Nama Pelajar
(Name of Student) : **Saqib Ali**

Tajuk Tesis / Disertasi
(Title of the Thesis / Dissertation) : **The Antecedents of Consumer Intention to Purchase Halal Cosmetic Products in Pakistan: Using Behavioral Reasoning Theory**

Program Pengajian
(Programme of Study) : **Doctor of Philosophy**

Nama Penyelia/Penyelia-penyelia
(Name of Supervisor/Supervisors) : **Assoc. Prof. Dr. Fairol Halim**

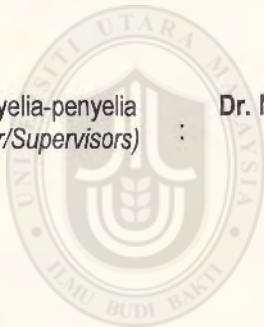


Tandatangan

Nama Penyelia/Penyelia-penyelia
(Name of Supervisor/Supervisors) : **Dr. Norzieriani Ahmad**



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ABSTRACT

The research on halal cosmetic buying intention is still at the early stage and the reason to explain the buying behavior of halal cosmetic products among young Muslim consumers still remains unclear. To investigate this issue, this study has examined the factors that influence an individual's intention to purchase halal cosmetic products. Literature review in this field shows that religiosity dimensions (i.e., interpersonal religiosity and intrapersonal religiosity) related to halal cosmetic in terms of understanding an individual's intention to purchase halal cosmetic products has been neglected. This research developed a more comprehensive model to investigate factors that influence individual's intention to purchase halal cosmetic products. This is done by incorporating religiosity dimensions in the behavioral reasoning theory. In this theory, the reasoning approach provides a complete set of antecedents that provide a better explanation of the intention to purchase halal cosmetic products, thus enhancing the practical contributions of this study. Data was collected through self-administered survey questionnaire from 542 full-time students in local private medical colleges located in the province of Punjab, Pakistan. Structural equation modeling was employed as the main statistical technique. Overall, the results indicate that the proposed model provides a good understanding of factors that influence the intention to purchase halal cosmetics products. Approximately 61% of the total variance of intention was explained by this proposed model indicating that the addition of the religiosity construct has increased the model's explanatory capability. The results reveal that the model provides a better understanding of factors that influence the intention to purchase halal cosmetic products. The study also highlights the implications and limitations of the study as well as the suggestions for future research.

Keywords: Islamic economy, Halal cosmetic, Religiosity, Pakistan, Behavioral reasoning theory

ABSTRAK

Penyelidikan tentang niat membeli kosmetik halal masih berada di peringkat awal dan taakulan untuk menerangkan tingkah laku pembelian produk kosmetik halal dalam kalangan pengguna muda Muslim masih kurang jelas. Untuk menyelidik isu tersebut, kajian ini meneliti faktor-faktor yang mempengaruhi niat individu untuk membeli produk kosmetik halal. Kajian literatur dalam bidang ini menunjukkan bahawa dimensi keagamaan (iaitu keagamaan interpersonal dan intrapersonal keagamaan) yang berkaitan dengan kosmetik halal dari segi memahami niat seseorang individu untuk membeli produk kosmetik halal telah diabaikan. Kajian ini membangunkan model yang lebih menyeluruh untuk menyelidik faktor yang mempengaruhi niat individu untuk membeli produk kosmetik halal. Hal ini dilakukan dengan menggabungkan dimensi keagamaan dalam teori pemikiran tingkah laku. Dalam teori ini, pendekatan taakulan menyediakan satu set lengkap antededen yang menyediakan penjelasan yang lebih baik mengenai niat untuk membeli produk kosmetik halal, sekali gus meningkatkan sumbangan praktikal bagi kajian ini. Data dikumpulkan melalui soal selidik tadbir sendiri daripada 542 orang pelajar sepenuh masa di kolej perubatan swasta tempatan yang terletak di wilayah Punjab, Pakistan. Pemodelan persamaan berstruktur digunakan sebagai teknik statistik utama. Secara keseluruhan, keputusan menunjukkan bahawa model yang dicadangkan memberikan pemahaman yang baik tentang faktor-faktor yang mempengaruhi niat untuk membeli produk kosmetik halal. Kira-kira 61% daripada jumlah varians niat yang dijelaskan oleh model yang dicadangkan ini menunjukkan bahawa peningkatan dalam pembinaan keagamaan telah meningkat keupayaan penerangan model. Keputusan menunjukkan bahawa model memberikan pemahaman yang lebih baik tentang faktor-faktor yang mempengaruhi niat untuk membeli produk kosmetik halal. Kajian ini juga menunjukkan implikasi dan batasan kajian serta cadangan untuk kajian pada masa hadapan.

Kata kunci: ekonomi Islam, kosmetik halal, keagamaan, Pakistan, Teori tingkah laku penaakulan

ACKNOWLEDGEMENTS

In the name of Allah S.W.T, the Most Gracious and the Most Merciful, I thank You for giving me the strength to complete this thesis. First and foremost, my sincere gratitude and appreciation goes to my supervisors, Associate Prof. Dr. Fairol Bin Halim and Dr. Norzieiriani bt. Ahmad for their constructive ideas, guidance, and patience throughout the duration of preparing this thesis. I convey my sincerest thanks to Dr. Yaty binti Sulaiman and Dr. Normalisa binti Md Isa, for their careful evaluation of my work and for their invaluable feedback which has immensely helped in enriching my thesis. Also, I am grateful to Professor Dr. Rushaimi Zien Yusoff, Prof. Dr. Rosli Mahmood, Associate Prof Dr. Selvan Perumal, Dr. Noor Azmi bin Hashim, Dr Zaleha binti Othman, Dr. Francis Chuah and Dr Jacky Cheah for their valuable assistance.

I would also like to thank to all the staff at OYA Graduate School of Business, Universiti Utara Malaysia (UUM) for their invaluable helps throughout my study. Finally, and most important, I would like to extend my affection to my family members and friends thank you for providing me with overwhelming patience, love, encouragement, and inspiration that have greatly facilitated the completion of this challenging work.

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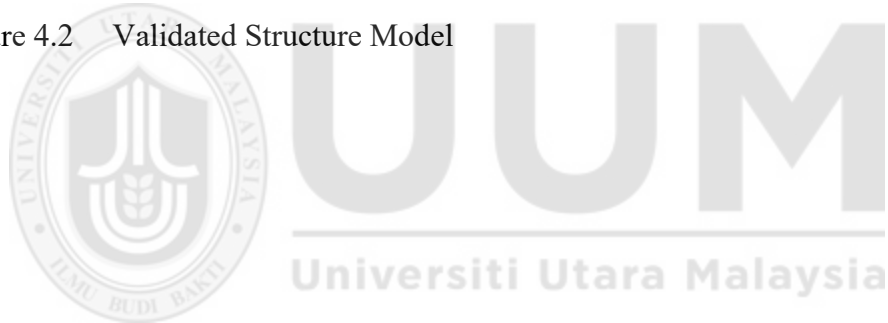
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LIST OF ABBREVIATIONS

TRA	Theory of Reason Action
TPB	Theory of Planned Behavior
BRT	Behavioral Reasoning Theory
SEM	Structural Equational Modeling
CB-SEM	Covariance Based Structural Equational Modeling
PLS-SEM	Partial Least Squares Structural Equational Modeling
CMV	Common Method Variance
AVE	Average Variance Extracted
HTMT	Heterotrait-Monotrait Ratio
ATT	Attitude
SN	Subjective Norm
PBC	Perceived Behavioral Control
KN	Knowledge
HE	Health Consciousness
EC	Environmental Consciousness
FI	Family Influence
MI	Media Influence
SE	Self-Efficacy
GS	Government Support
PI	Purchase Intention

... CHAPTER:ONE

INTRODUCTION

1.1 Background of the study

Muslim is the World's second largest religious group. Pew Research Center (2017) reveals that followers of Islam are 1.8 billion, that makes 24.1 % of total world's population in 2015. Forty-five years later, they are expected to make up more than three-in-ten of the world's people 31.1%. It is estimated that Muslims population going to grow as twice as fast as overall world population from 2015 to 2060 and, in the second half of this century, will likely surpass Christians as the world's largest religious group. World's population is projected to grow 32 % in coming decades, but Muslims will be going to grow by 70 % as depicted in Figure 1.1 and becomes 3 billion in 2060 against 1.8 billion in 2015.

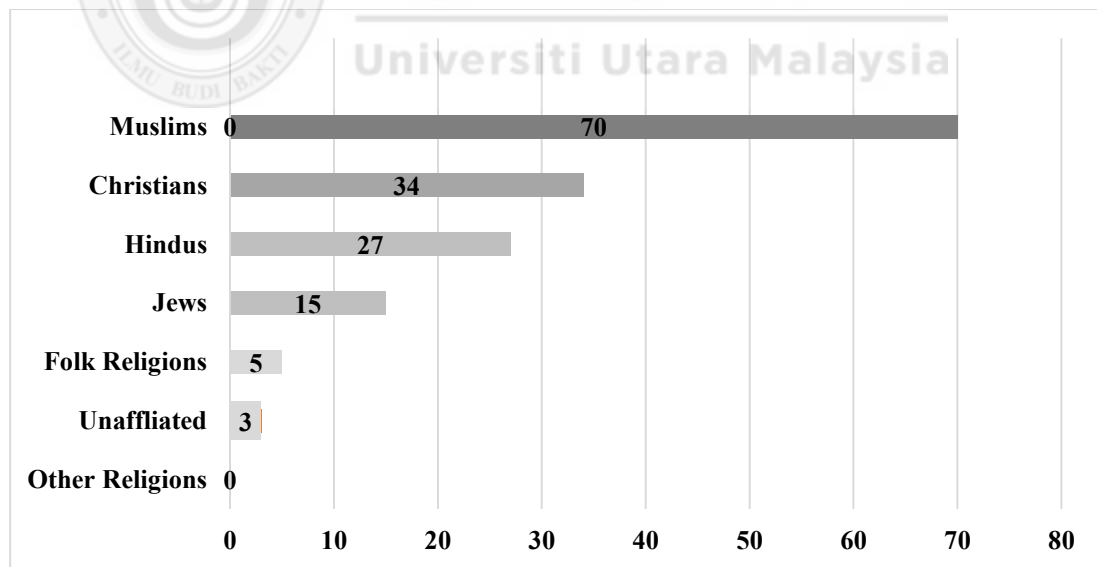


Figure 1.1

Estimated percent changes in population size, 2015-2060

Source (Pew Research Center, 2017)

The growth of the Muslim population is helped by the fact that Muslims have the youngest median age 24 in 2015 of all major religious groups, more than eight years younger than the median age of non-Muslims 32 as shown in Figure 1.2 (Pew Research Center, 2017).

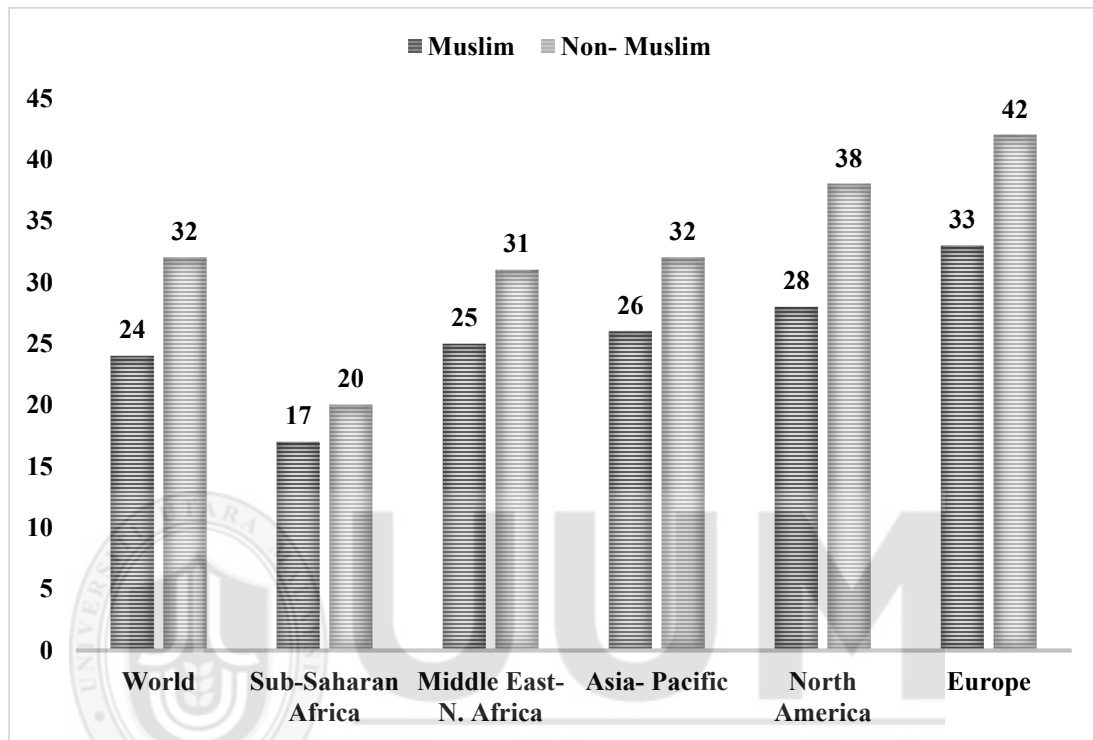


Figure 1.2
Muslim and Non-Muslim median age, by region, 2015
Source (Pew Research Center, 2017)

Billion consumer segments have commonly used the term in marketing that means a huge consumer segment. China (first), India (second) and women (third) are three already established billion consumer groups' segments (DeAnne Aguirre, 2012). Recently researchers energetically propose Muslim consumers as a potential addition to the list as a fourth billion consumer segment. Among the four composed billion consumer groups segments, Muslims consumer segment is the largest billion consumer segment (Alserhan, 2011; Alserhan & Alserhan, 2012; DeAnne & Karim, 2010). First, empirical study to

examine the total amount of research Muslims consumer received within the last eight decades have conducted by Alserhan and Alserhan (2012). Findings of this study show that Chinese billion consumer segment attract 55% studies; Women billion consumer segment depict 24% studies, third billion consumer segment (Indian) attract 16% studied, and finally the largest billion consumer segment Muslims only attract 4% studies. World largest, youngest consumer segment (Muslim) with the fastest growth rate in the world, who serve as a catalyst for global economic growth has become under-researched (Alserhan & Alserhan, 2012). Muslim consumer segment is not considered worthy of research as well as Muslim consumer are not researched adequately (Alserhan & Alserhan, 2012; Sandikci, 2011). Both non-Muslim academicians and practitioners have been admitted that they have not considered Muslims as a consumer to avoid offending (Boulanouar, 2011; Edwards, 2010; Sandikci, 2011). The dearth of scholastic work on Muslims consumer is a matter of concern for both academicians and practitioners. In spite of the critical importance of the Muslims due to the largest billion consumer segment (Alserhan & Alserhan, 2012) for both academic and practitioner communities, this aspect of the investigation is still lacking in the literature.

Islamic economy affects 1.7 billion Muslims globally. The Islamic economy is open to all consumers, citizens, and businesses from Alaska to Australia. Islamic economy means “ a way of living – through products, experiences, services, processes, and relationships that is halal, ethical, wholesome and family-friendly” (Thomsan Reuters, 2015). According to State of the Global Islamic Economy Report (2014), there are the three core sectors of

Islamic Economy Islamic such as finance (first), halal food (second) and lifestyle sector (third).

State of the Global Islamic Economy Report (2013) reveals that the global Islamic economy has to be worth of US\$ 3042 billion in 2012 from which Islamic finance assets has to be the value of US\$ 1354 billion, spending on food US\$ 1080 billion and lifestyle sector US\$ 608 billion respectively (Thomson Reuters, 2013). In line with that, State of the Global Islamic Economy Report (2014) show that the global Islamic economy has to be a figure of US\$ 3660 billion in 2013 from where Islamic finance assets have to be worth of US\$ 1658 billion, expenditure on food US\$ 1292 and lifestyle sector US\$ 708 billion respectively (Thomson Reuters, 2014).

Aforementioned details draw attention towards the importance of lifestyle sector of Islamic economy. Despite the importance of the lifestyle sector for both producers and consumers, lifestyle sector predominantly a less explored area came under prime focus for researchers, the existing literature focuses only on Islamic finance and halal food. There is a scarcity of scholarly literature on lifestyle sector which worth US\$ 608 billion in 2012. In relation to that worth US\$ 708 billion in 2013 in the global Islamic economy (e.g. Ahlam Nuwairah Ahmad, Rahman, & Ab Rahman, 2015; Awan, Siddiquei, Haider, Sarkis, & Sarkis, 2015; El Ouafy & Chakir, 2015; Farrag & Hassan, 2015; Souiden & Rani, 2015).

According to the latest reports by Thomson Reuters (2013) and Thomson Reuters (2014), titled “State of the Global Islamic Economy” show that the Lifestyle sector of Islamic

economy consists of five sub-sectors such as fashion, travel, pharmaceuticals, media/recreation, and cosmetic. Lifestyle sector of the global Islamic economy, expands US\$ 100 billion in 2013 as compared to the previous year. Fashion/clothing expense increase 16%, travel expense increased 2%, pharma expense increase 3%, media/recreation expense increase 18% and cosmetics expense increase dramatically 43% in 2013 as compared to the previous year as shown in Table 1.1. Dramatically expense increase of Muslims on cosmetic sector leads attention towards the cosmetic industry.

Table 1.1
Lifestyle sector expense

Sector Lifestyle sector	State of the Global Islamic Economy		Expense (%) increase in expense
	Report 2013	Report 2014	
Cosmetic	26	46	43%
Media/Recreation	151	185	18 %
Fashion/Clothing	224	266	16 %
Pharma	70	72	3 %
Travel	137	140	2 %

One of the fastest growing and cutthroat industries in the world is a cosmetic industry. The cosmetic industry is defined by S. Kumar, Massie, and Dumonceaux (2006) as “a very lucrative, innovative, and fast-paced industry”. Notable growth of cosmetic industry and antagonistic consumption of cosmetic products have seen in USA, European, and Asian markets (Thomson Reuters, 2013, 2014).

According to the State of the Global Islamic Economy Report (2013), total global spending on cosmetics is estimated to be US\$ 460 billion in 2012. Global spending on cosmetics increase dramatically US\$ 222 billion in 2013 as compared to the previous year and

reached US\$ 683 billion in the year 2013 from which USA spending on cosmetic US\$ 81 billion, followed by Japan US\$ 77 billion, China US\$ 49 billion, global Muslim market US\$ 46 billion, and Germany US\$ 35 billion as shown in Figure 1.2 (State of the Global Islamic Economy Report 2014/2015).

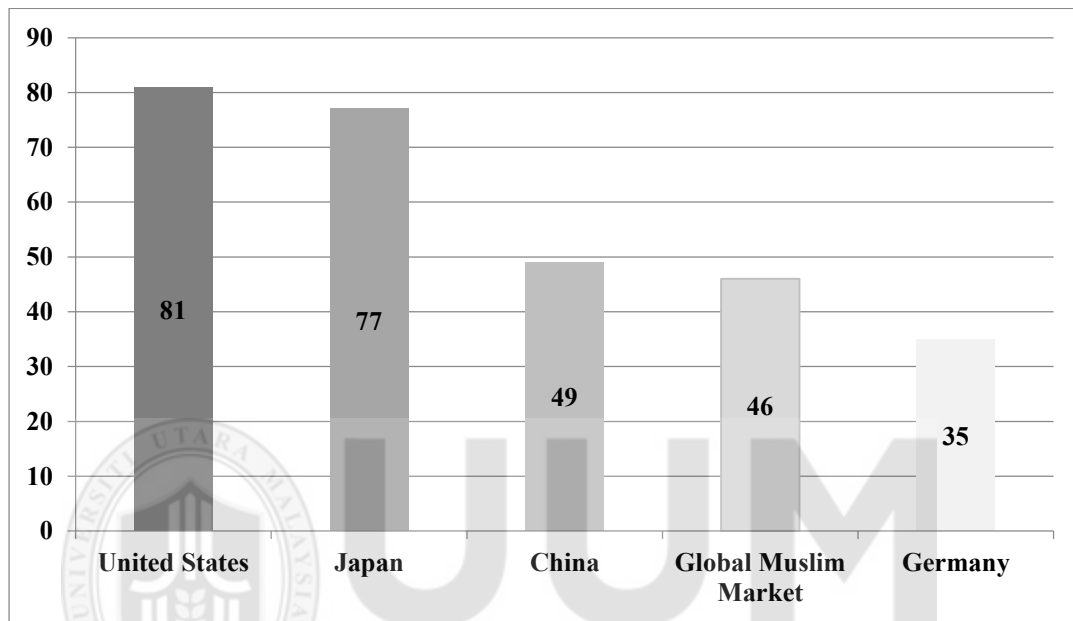


Figure 1.3
Global Muslim market compare to the rest of the world
Source (State of the Global Islamic Economy Report, 2014)

Cosmetic industry affects the colorful social lives of humans all over the world. In addition, a high portion of global GDP comes from cosmetic industry (S. Kumar, 2005). The ancient Egyptian, Greek, and Roman have a thousand years long history of the use of cosmetics, at what time cosmetics are used for painting bodies for various purposes including ceremonies, wars and mating rituals (S. Kumar, 2005; S. Kumar et al., 2006; Mitsui, 1997). S. Kumar et al. (2006) indicated that when people talk about the cosmetic industry it is commonly referred to color cosmetic or makeup cosmetic. Color cosmetic or makeup cosmetic contributes only 20% to the global cosmetic segment and remaining 80% global

cosmetic segment is roofed by skin care, toiletries, hair care and fragrance. Cosmetic cover a wide range of products including skin care, toiletries, makeup, hair care and fragrance (Thomson Reuters, 2013).

Beauty is desired, despite the risks (Staff, 2013). Cosmetics are used for many purposes (Hardon, Idrus, & Hymans, 2013; Sturrock & Pioch, 1998). People wear makeup for the purpose of “sexual attractiveness”, “social and professional interaction success”, “emotional pleasure”, “better physical appearance”, “self-perception”, “better earnings” plus for “symmetrical face” (Apaolaza-Ibáñez, Hartmann, Diehl, & Terlutter, 2011; Askitas, Professor Klaus F. Zimmermann, Maurer-Fazio, & Lei, 2015; C. L. Cox & Glick, 1986; Mulhern, Fieldman, Hussey, Lévêque, & Pineau, 2003; Nash, Fieldman, Hussey, Lévêque, & Pineau, 2006; Parrett, 2015). Our bodies and facial appearance play significant roles in present society. Social setup triggers people to use cosmetics (Gill, Henwood, & McLean, 2005; Li, Min, Belk, Kimura, & Bahl, 2008; Turner, 2008). For example in Asian societies white, fair and falls skin is a characteristic of beauty (Li et al., 2008).

First image that comes to mind when anyone listen to the word cosmetic is that cosmetic is a “feminine aura” and most of the companies capture this segment (F. Jabar, Wahid, Johar, & Rahman, 2016; F. A. Jabar, Ishak, Johar, & Wahid, 2014; S. Kumar et al., 2006; Mansor, Ali, & Yaacob, 2010). This feminine association of cosmetic was more common in the nineties and at present cosmetics are not monopolized by feminine association (S. Kumar et al., 2006). Now, this vague concept becomes more clear thoughts and new marketers capturing and targeting young generation in addition to males as a new market

segment of cosmetics (Deshmukh, 2015; Ji-Youn Lee 2007; Krishnan, Koshy, & Mathew, 2013; Mansor et al., 2010; Souiden & Diagne, 2009).

Based on new technological advancement like other industries cosmetic industry is also looking for new, better, cheap and readily available products (P. Hashim & Mat Hashim, 2013; S. Kumar, 2005; S. Kumar et al., 2006). At the same time, information regarding the identity and the source of the ingredients used in cosmetics is not always readily available; therefore verification of the authenticity and acceptability of the ingredients may be needed (Lockley & Bardsley, 2000). The cosmetics industry is monopolized by non-Muslim manufacturers and production houses are also based in non-Muslim countries those are not clear about the permissibility (halal) of elements. They use liquors (alcohol) as “humectants”, lard and lard derived ingredients in the formulation of skin care products and makeup because it is cheaper and easily available (Ahlam Nuwairah Ahmad et al., 2015; P. Hashim & Mat Hashim, 2013; Mukhtar & Mohsin Butt, 2012; Swidi et al., 2010). The use of pork and lard is a serious matter of concern from the perspective of several religions, for instance, Islam and Judaism. Muslims require the products they use to be halal while the Jews require them to be kosher (Mukhtar & Mohsin Butt, 2012; Regenstein, Chaudry, & Regenstein, 2003; Swidi et al., 2010).

All conventional cosmetic products such as personal care products (shampoos, shower gels, shaving creams, soaps), leave on products (skin lightening creams, sunscreens, moisturizer), fragrance products (deodorants, aftershaves, perfumes), make-ups products (lipsticks, eyeshadows, foundations), hair care products (styling agents, colorants, sprays,

gels) and nail care products (paint removers, nail varnishes) causes a number of allergic reactions (V. Smith & Wilkinson, 2016). Addressing the issue further (BBC News, 2016); reported that use of the conventional cosmetic products of the multinational companies i.e. Johnson & Johnson causes cancer. A study carried out by Kamaruzaman (2008) found that millions of tons of fats, oils, bones and other components derived from the dead animal are reused. These extracts are used for food supplement to feed animals, after using for animal supplements remains are used in cosmetics which doubtful about the permissibility (halal) of cosmetics (Ahlam Nuwairah Ahmad et al., 2015; Kamaruzaman, 2008).

Ryan (2015) reported that China, Vietnam, and Hong Kong cosmetic companies used donkey's fat and skin in cosmetics such as anti-wrinkle creams. In line with that Michael (2015) indicate that cosmetic companies love to use donkey milk in cosmetic products because it gives special shine to the face and prevents aging effects. They were targeting customers from all over the world. The issues of the ingredient in cosmetics are a matter of concern for all bodies and become a huge question mark. In addition, the demand for halal products not merely focusing on food but also capture to other non-food products categories such as cosmetics (A. J. C. M. Hashim & Musa, 2013; Yener, 2014).

Halal searches on Google search engine worldwide from 2004 to 2016 show dramatically upward interest over time as shown in Figure 1.4 (Google Trends, 2016). Consumer demand for halal products in general and halal cosmetics in particular is estimated to increase as its associated with the increase of Muslim population plus due to increased and better quality of halal products (P. Hashim & Mat Hashim, 2013; Latif, Mohamed, Sharifuddin, Abdullah, & Ismail, 2014; Swidi et al., 2010). In response to demand from

Muslims consumers for Shariah compliance, halal cosmetic, and personal care manufacturers have begun to mushroom across the world recently. Examples include, but are not limited to, IVY Beauty Corp and Glamore from Malaysia, SaafPure Skin Care and Pure Mineral MakeUp from the UK, Amara Halal Cosmetics from North America, and Dead Sea Minerals from Jordan etc.

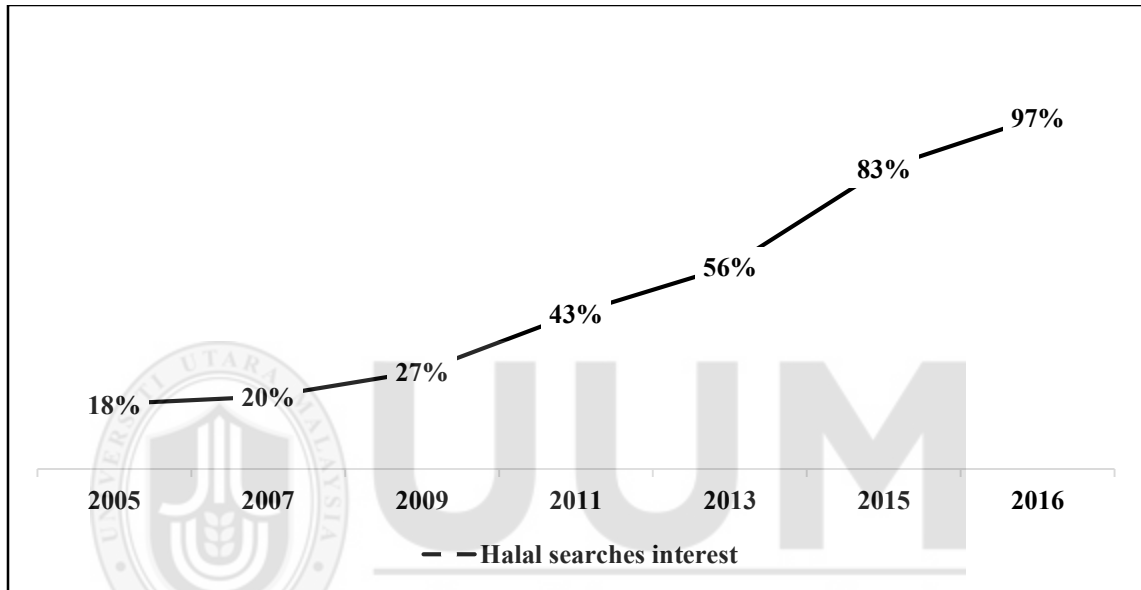


Figure 1.4
Halal searches interest over time on Google from 2004-2016
Source (Google Trends, 2016)

Furthermore, established multinational companies, like Revlon (Voice of America, 2010) and Colgate-Palmolive (Colgate Palmolive, 2011) have also started to produce halal, vegetable or mineral based products to cater to the growing Muslim market (N. U. Ansari & Mohammed, 2015). Industries respond to their consumers demand similarly cosmetics industry have to do the same (Teng & Jamaliah, 2013). Research on halal products increased awareness as well encourage manufacturers, producers, and marketers should not only think about how to increase the return but also they should understand basics on the

preparation about halal to encourage them to produce innovative goods that are truly halal (A. J. C. M. Hashim & Musa, 2013). Researchers indicate that consumers prioritize halal products and they are willing to pay higher for brands those are labeled as halal (Hussin, Hashim, Raja Yusof, & Alias, 2013).

Due to safety, hygiene, and quality assurance, the concept of halal products is going to be famous and the topic of discussion worldwide (Ambali & Bakar, 2014). Choosing halal products is a must and essential requirement for Muslim consumers to fulfill the religious requirement and gain soul satisfaction while consuming. Non-Muslim consumers those have no religious obligations, on the other hand, value halal because of its organic nature and health benefits which are a purely mindful individual decision (Mathew, 2014; Rezai, Mohamed, & Nasir Shamsudin, 2012; Rezai, Mohamed, Shamsudin, & Chiew, 2010). Non-Muslim consumers do have purchasing and positive intentions towards halal cosmetics. This is a vital opportunity for the halal industry to seriously consider the non-Muslim community in halal marketing potential (Haque, Sarwar, Yasmin, Tarofder, & Hossain, 2015; Mathew, 2014).

The importance of cosmetic sector is quite evident from the abovementioned information but there is still lacking in the literature. Halal cosmetic is being predominantly a less explored area come under prime focus for researchers and the consumer behavior towards halal cosmetics is still questionable, thus it seems that the halal cosmetics sector is in need of further auxiliary research (Abd Rahman, Asrarhaghghi, & Ab Rahman, 2015; Ahlam Nuwairah Ahmad et al., 2015; N. U. Ansari & Mohammed, 2015; Yeomans, 2014). In

relation to that, Shah Alam and Mohamed Sayuti (2011) indicated that there is a dearth of theory-driven researches on halal products.

State of the Global Islamic Economy Report 2014; indicates top five countries for the halal cosmetic which are Malaysia, Egypt, Singapore, Pakistan and United Arab Emirate (Thomson Reuters, 2014). According to (World Development Indicators, The World Bank, 2014) Malaysia is the 45th most populated country with the population of 29.902 million, Egypt is the 15th most populated country with the population of 89.58 million, Singapore is the 112th most populated country with the population of 5.47 million, Pakistan with population of 185.044 million people stands at 6th position in the world and UAE is 92nd most populated economy with 9.086 million people in the world. Above mention, top five potential countries for halal cosmetics (State of the Global Islamic Economy Report, 2014); population according to World Bank is given below in Table 1.2.

Table 1.2
Top five potential countries for halal cosmetics population according to World Bank

Country	Population (million)	Ranking	Year
Malaysia	29.902	45	2014
Egypt	89.58	15	2014
Singapore	5.47	112	2014
Pakistan	185.044	6	2014
United Arab Emirates	9.086	92	2014

Aforesaid statistics draw attention towards Pakistan as an area of study. According to the existing body of knowledge, few empirical types of research have been conducted in Pakistan on halal cosmetics intentions like Baig and Baig (2013) or Majid, Sabir, and Ashraf (2015). In line with that, additionally, N. U. Ansari and Mohammed (2015) noted that past studies done in Pakistan on the phenomenon of halal have been in the domain of

either food or finance. However, in Pakistan empirical studies particular in non-food halal products like cosmetics are in paucity. In Pakistan, 90 % of people are consuming non-halal products (Y. H. Khan, 2016), which indicate that the consumption pattern of Pakistani consumers is not clear which is alarming for both consumers and government. Donkey's fat and skin are being used in cosmetic production in Pakistan, which is the matter of concerned for consumers (Dunya News, 2015). Furthermore, leading Pakistani cosmetics companies (i.e. Golden Pearl, Faiza Beauty Cream, Face Fresh, Stillman's, Maxi Light) products has been fined by London Trading Standards because they contained enough harmful chemicals to cause cancer, skin discolouration and skin thinning (Express News, 2017). Pakistani consumer increasingly choosy about their cosmetics and they demand halal cosmetics (Qamar, 2015). According to the future market insights, Pakistan has the bulk of demand for halal cosmetics due to the high Muslim population (Yeomans, 2015).

World Bank's South Asia Economic Report (2015) shows that Pakistan has a growth rate of 4.4%. It comes under lowest eight economies of South Asia. The global halal industry is growing very rapidly but Pakistan's share is only 0.3% that's negligible. In spite of the 2nd largest Muslim populous country and having larger economy among OIC countries, Pakistan has dropped down his ranking and placed at 6th place among other countries in global Islamic economy ranking (State of the Global Islamic Economy Report, 2016/2017). Internationally and locally economic growth of Pakistan can be doubled if the government can capture the halal markets (Y. H. Khan, 2014). In relation to that, it is supported by Yusof and Shutto (2014) who found that halal products industry is served as a catalyst to reenergize the weaken economy of the country. Thus this study is a dire need for the

researcher because it provides a fertile land for the development of a halal industry that leads Pakistan towards the strongest economy.

From the research background, following research motivations can be derived. First, Muslims consumers are not yet considering worthy for research and have not been researched adequately. Second, importance of halal cosmetics industry is not ignorable from both producer and consumer's side, but researchers found that research inadequately on several aspects of consumer behavior regarding halal cosmetics. Lastly, Pakistan predominantly ignores for empirical research in the cosmetic domain which has access to 470 million halal consumers and more potential to flourish halal industry in general and halal cosmetic in particular.

1.2 Problem Statement

A deeper understanding of Muslims consumers become essential because halal consciousness is gaining momentum among the Muslim and non-Muslim territories (Fathi, Zailani, Iranmanesh, Kanapathy, & Griffith, 2016). The halal cosmetic industry is on the rise among the Muslims because expenditure on personal care products is expected to continue to grow over the coming years (A. J. C. M. Hashim & Musa, 2016; Hassali, AL-Tamimi, Dawood, Verma, & Saleem, 2015). Muslims cosmetic market is the 4th largest market in the world by spending US\$ 56 billion on cosmetic in 2015 alone and make over 7% of the global expense, which is estimated to increase US\$ 81 billion in 2021 (State of the Global Islamic Economy Report, 2016/2017). In spite of huge Muslim population, massive expense on cosmetics and 4th largest consumer market, halal cosmetics just hold

4% market share in the global market (Thomson Reuters, 2014; Yeomans, 2014). This statistical evidence on the halal cosmetic show that consumption pattern of Muslims towards halal cosmetic still remains unclear.

Halal cosmetic remains in its infancy; there is plenty of room for further education and development in what determines a cosmetic product (Yeomans, 2014). Researchers in marketing and consumer behavior agree that large body of previous halal studies focused on food and there is a scarcity of investigation on non-food halal products like halal cosmetics (Abd Rahman et al., 2015; N. N. A. Aziz, Aziz, Aziz, Omar, & Hassan, 2015; Mohezar, Zailani, & Zainuddin, 2016). Moreover, research related to halal cosmetic consumption behavior is still needed because it seems that consumer's behavior is changing over time (Hassali et al., 2015). Therefore, the present study attempts to understand the halal cosmetic consumption behavior.

To date, it is ironic and paradoxical to note that within this extant literature, unanimity on the key antecedents for consumer purchase intentions towards halal cosmetic products is still lacking (e.g Ahlam Nuwairah Ahmad et al., 2015; N. U. Ansari & Mohammed, 2015; J. C. M. Hashim & Rosidah Musa, 2014; Hussin et al., 2013; Majid et al., 2015; Musa, 2014; Teng & Jamaliah, 2013). Hence, there is a disagreement on what are the significant predictors that effect on halal cosmetic buying behavior is similar to the parable of the Blind Men and the Elephant.

Despite an array of studies in this area, there is currently lesser-known literature in the field of study that addressing which variables can affect consumers' attitudes, subjective norms and perceived control behavior towards intention to purchase halal cosmetic products by using behavioral reasoning theory (BRT) (i.e Abd Rahman et al., 2015; N. U. Ansari & Mohammed, 2015; Kaur & Osman, 2014). Thus this study intended to minimize the gap in literature and develop more understanding concerning the factors that affect intention of halal cosmetics, based on behavioral reasoning theory (BRT) assesses the effects of knowledge, health consciousness, environmental consciousness on attitudes, family and mass media on subjective norms, self-efficacy and government support on perceived control behavior towards halal cosmetics products, as well as the effect of those attitudes, subjective norms, perceived control behavior and religiosity on the intention to buy halal cosmetic products.

An examination of earlier studies on Muslim halal cosmetic buying behavior have neglected the impact of knowledge, health consciousness and environmental consciousness on consumer's attitudes towards halal cosmetic buying intention (e.g. N. U. Ansari & Mohammed, 2015; A. Aziz, Noor, & Wahab, 2013; A. J. C. M. Hashim & Musa, 2013; Jihan, Musa, & Hassan, 2016). However, there is growing empirical evidence that knowledge (Putit & Johan, 2015), health consciousness (Ambali & Bakar, 2014), and environmental consciousness (Islam & Chandrasekaran, 2016) are powerful predictors of Muslim buying decision. Therefore, there is a need to examine knowledge, health consciousness, and environmental consciousness precisely in the context of halal cosmetic.

Researchers in marketing and consumer behavior (A. S. Al-Ajam & Md Nor, 2015; Md Husin, Ismail, & Ab Rahman, 2016) identified communication channels as major determinants of Muslims consumption behavior. However, despite the crucial role communication channels play with regard to Muslim consumption behavior. They have received scant attention by researchers in halal cosmetic context (e.g. Abd Rahman et al., 2015; Ahlam Nuwairah Ahmad et al., 2015; N. U. Ansari & Mohammed, 2015; Kaur & Osman, 2014). This study, therefore endeavors aims to bridge these gaps by examining the impact of different communication channels on the subjective norm and the intentions to purchase halal cosmetic products.

BRT postulate that perceived behavioral control is determined by reasons because they help individuals that they rationalized or justify their decisions and enhance or protect their self-worth (Westaby, 2005a). Despite the importance of PBC reasoning approach as discussed above, until recently, it is largely ignored by the researchers (e.g N. U. Ansari & Mohammed, 2015; Kaur & Osman, 2014; Yeon Kim & Chung, 2011). Thus, this study breaks down perceived behavioral control reasons into self-efficacy and government support to narrow down this gap because there is growing empirical evidence that self-efficacy and government support are critical to the decision-making process and powerful predictor of consumer behavior (Al-Majali & Nik Mat, 2010; M. Tan & Teo, 2000; Teo & Pok, 2003).

Past consumer's behavior researchers have found that religiosity has been significantly influencing on several aspects of consumer behavior (Charsetad & Charsetad, 2016; Islam

& Chandrasekaran, 2016; Kamalul Ariffin, Ismail, & Mohammad Shah, 2016; Mansour, Diab, & Wilson, 2016; Muhamad, Leong, & Mizerski, 2016). However, the research on the impact of religion on consumer behavior is still sparse and limited (Islam & Chandrasekaran, 2015; Kahle, Minton, Jiuan, & Tambyah, 2016; Newaz, Fam, & Sharma, 2016). In addition, there is a paucity of research that shows which dimension of religiosity has the most important impact on Muslim buying behavior (Souiden & Rani, 2015). Therefore, this study examines the impact of individuals' religiosity based on intrapersonal and interpersonal religiosity commitments in shaping halal cosmetic buying behavior.

In the past, substantial body of research on halal cosmetic consumption behavior has been done in Malaysian context which is racially heterogeneous i.e. the population comprises different races like Malays, Chinese, Indians, and other minority groups (for example: Abd Rahman et al., 2015; Ahlam Nuwairah Ahmad et al., 2015; A. Aziz et al., 2013; A. J. C. M. Hashim & Musa, 2016; Musa, 2014). Authors that employ center of attention Malaysia as an area of study note down that their results cannot be generalized to the broader community and the next phase of our research demand empirical work is to be done in other Islamic countries, e.g. Pakistan, Indonesia, Bangladesh etc. (Abd Rahman et al., 2015; Musa, 2014). To overcome contextual gap represents an adequate contribution to the marketing literature (Ladik & Stewart, 2008). Thus, to bridge the contextual gap in literature researcher conducts this study in Pakistan.

Additionally, the present study focuses on the promising market segment of young consumers (Generation Y) due to two reasons. Firstly, the empirical research on explaining

the halal consumption among Muslims from generation Y point of view has been limited and slow to develop (Khalek & Ismail, 2015). Secondly, this study is different from previous studies (i.e. Abd Rahman et al., 2015; Ahlam Nuwairah Ahmad et al., 2015; N. U. Ansari & Mohammed, 2015) which were conducted on halal cosmetic buying behavior, with no distinction in respect of age group of customers.

Finally, from a practical perspective, it was pointed out by some industry practitioners that halal cosmetic industry faces challenges in marketing and advertising of halal cosmetic products because it is in the embryonic stage. They indicated that more comprehensive model is a dire need for the industry to design effective marketing strategies (State of the Global Islamic Economy Report, 2013, 2014). Therefore, there is a need to examine factors precisely that effect halal cosmetic intention to build effective marketing strategies for the halal cosmetic industry.

1.3 Research Questions

The following format of questions is based on the issues discussed in the research problem of the present study which focuses on the integrated effect of religiosity and behavioral reasoning theory in examining the halal cosmetic intention. They are developed to find out what the factors actually are those influence halal cosmetic intentions.

- 1) Do attitudes, subjective norm, perceived behavioral control and religiosity influence the halal cosmetic intention?
- 2) Do the knowledge, health consciousness and environmental consciousness affect the attitude?

- 3) Do family influence and mass media influence affect subjective norm?
- 4) Do self-efficacy and government support affect perceive behavioral control?
- 5) Does religiosity explain additional variance in halal cosmetic intention?

1.4 Research Objective

The main objective of this study is to focus on the integrated effect of religiosity and behavioral reasoning theory in examining the halal cosmetic intention. Basically, the following objectives are the main focus:

- 1) To determine whether attitudes, subjective norm, perceived behavioral control and religiosity influence the halal cosmetic intention.
- 2) To examine whether knowledge, health consciousness, and environmental consciousness affect the attitude.
- 3) To investigate whether family influence and mass media influence affect subjective norms.
- 4) To examine whether self-efficacy and government support affect perceived behavioral control.
- 5) To evaluate whether religiosity contributes to explain additional variance in individuals' intention to purchase halal cosmetic products.

1.5 Scope of Study

This study focuses on investigating the consumer behavioral intention of Pakistani consumers towards halal cosmetics. The scope of the present study comprises medical and dental college students who are enrolled in private medical and dental colleges located in

Punjab and recognized by the Pakistan Medical and Dental Council. College students were selected as sample due to some reasons such as 60 % of Pakistan's population comprises of youth. The median age of Pakistani population is 22.6 years which is quite suitable for cosmetic usage. According to Kyung (2012), the age range of college or university students is appropriate to investigate the cosmetics consumption related variables because they actively use cosmetics in this age group. Rezvani, Rahman, Dehkordi, and Salehi (2013) stated that consumer who used cosmetic products on daily basis were educated enough to understand the questionnaire.

1.6 Significance of Study

This study intends to investigate and determine the antecedents of halal cosmetic buying intention in the Pakistani context, using the BRT theory (Westaby, 2005a). The researcher expects that this research will be significant in several areas, by adding new knowledge for the academics, practitioners, and organizations. This research is significant since it will add new information to the existing literature, and develop an extended body of knowledge related to BRT. It also expects to formulate a new version of the BRT, as a comprehensive model to investigate a set of antecedents that influence halal cosmetic buying intention. This study will extend the BRT model by adding new constructs of religiosity as a determinant of an individual's buying intention towards halal products, or more specifically towards halal cosmetic. This may lead BRT towards broadening and increased BRT explanatory power. In addition, this study examines the robustness of the theory in its ability to predict consumer intention within diverse sampling frame.

The findings of this study impact the antecedents of consumer purchase intentions and increase the empirical literature in marketing and related disciplines. The direction of the relationship in this study verifies the theoretical inconsistency that exists in the previous studies. In addition, the newly developed model has not been applied in the cosmetic domain in general and halal cosmetic domain in particular. Moreover, there is none prior studies that use Behavioral Reasoning Theory (BRT) to discuss consumer intentions towards cosmetics in general and halal cosmetics in particular (e.g Abd Rahman et al., 2015; N. U. Ansari & Mohammed, 2015; A. Aziz et al., 2013; A. J. C. M. Hashim & Musa, 2013; Tajeddini & Nikdavoodi, 2014; Yeon Kim & Chung, 2011), because there have been few application of BRT and these have been in occupational settings (Westaby, 2005a; Westaby, Probst, & Lee, 2010).

From the methodological perspective, Souiden and Rani (2015) suggest that in order to validate the generalizability of religiosity measurement, it needs to further cross-validation of the items in non-Christian context. Since the religiosity measurement has been mostly validated in Christian context, this study contributes to the methodological aspect by providing the reliability and validity of the religiosity scale in a Muslim context. Additionally, this study bridges the geographical contextual gap (Pakistani context) and industrial contextual gap (halal cosmetic). According to (Ladik & Stewart, 2008) fill the contextual gap (geography or industry) in marketing domain consider an adequate contribution to marketing literature.

From the practical perspective, findings of this study draw useful implications for both marketers and halal cosmetic manufacturers. Several practitioners from the industrial sector (halal cosmetic) were pointed out that halal cosmetic industry faces challenges in marketing and advertising of halal cosmetic products and they suggest that more comprehensive model is required to overcome this shortcoming (State of the Global Islamic Economy Report, 2013, 2014). This study examines the buying tendency factors of consumer towards halal cosmetic products because the understanding of factors that prompts or stops a consumer from buying halal cosmetic products is necessarily for marketers for the development of effective marketing strategies. For example, market segmentation, product positioning, pricing strategies, promotional strategies, distribution strategies and so on. New marketing strategies should be implemented to stimulate halal products versus regular product consumption to keep in mind the antecedents (religiosity, health consciousness, environmental consciousness, family, and friends, mass media) across a wide range of influential factors to attract intention. Considering the infancy, limitation and very scant empirical research on halal cosmetic buying behavior in the non-food halal context, it is anticipated that the findings from the study might create interest and provide an avenue for the development of further research in the similar or related area.

1.7 Definition of Key Terms

The following terms are defined in the context of this research, as explained below:

Constructs	Definition
Intention	Refers to “person’s location on a subjective probability dimension involving a relation between himself and some action intention is predicted by attitude and subjective norm and PBC in the TPB” (Ajzen, 1991).
Attitude	Refers to “the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question” (Ajzen, 1991).
Subjective Norm	Refers to “perception that significant referents desire the individual to perform a behavior or not” (Taylor & Todd, 1995a).
Perceived behavior control	Refers to “the perceived ease or difficulty of performing the behavior, people’s perception of their ability to perform a given behavior” (Ajzen, 1991).
Religiosity	Refers to “the extent to which an individual is committed to his religion, where it is then reflected in his/her attitudes and behavior” (B. R. Johnson, Jang, Larson, & De Li, 2001).
Knowledge	Refers to “awareness, consciousness or familiarity gained by experience or learning” (Abd Rahman et al., 2015).
Health consciousness	Refers to “the degree to which someone tends to care about their health” (Leong & Paim, 2015).
Environmental consciousness	Refers to “a tendency to mentally reflect on the environment and on behavior and psychological states that reflect environmental commitment” (Huang, Lin, Lai, & Lin, 2014).

Family influence	Refers to “the influence or pressure from sources known (family) to perform the behavior” (Ng & Rahim, 2005).
Self-efficacy	Refers to “a person’s judgment of their capabilities to organize and execute courses of action required attaining designated types of performances. It is concerned, not with the skills one has, but with the judgment of what one can do with whatever skills he/she possesses”. (Bandura, 1991).
Government support	Refers to “The facilitation of the condition which translates into how available the resources which are needed for the behavior are to be carried out”(Harry C Triandis, 1979).

1.8 Organization of the thesis

The thesis is arranged into five chapters including this chapter. Chapter 2, introduce the brief overview of halal cosmetic, highlights the relevant literature to the variables considered in this study, underpinning theory used in this study, and provides the framework for the research and states the hypothesis. Chapter 3, provides the research methodology used in this study. This includes the research design, variables measurements, study population and sampling design, the data collection procedure, result of the pilot test and the statistical methods to analyze the data. Chapter 4, focuses on the analyses and results of the study. Finally, chapter 5 presents the discussion and conclusion of the study. This chapter includes discussion of the findings in line with the objectives of the study, implications of the study, limitations, and suggestions for future research. The chapter ends with the concluding remark of the study.

CHAPTER TOW

LITERATURE REVIEW

2.1 Introduction

Creswell (2014) suggested that a literature review chapter should contain “sections about the literature related to major independent variables, major dependent variables, and studies that relate to the independent and dependent variables”. This chapter aims to review the existing literature that discusses the main conceptual pillars relevant to the topic of this thesis. In addition, assist to determine whether the topic is worth studying. It identifies what research has been conducted to date, and where the current study stands in relation to that research. The purpose of this study is to explore the behavioral intention of consumers toward halal cosmetics. The main domain of the literature studied relates to the behavioral intention toward halal cosmetics. Furthermore, three theoretical models (theory of reasoned action, the theory of planned behavior and behavioral reasoning theory) related to behavioral intention will be introduced and then combined, in order to form the theoretical foundation of this study. The first part of this chapter provides an overview of the perception of cosmetic in terms of beauty premium. Furthermore, describe cosmetic, purpose of the use of cosmetic, classification of cosmetic, the concept of halal in term of Quran and hadith, define halal cosmetic, principles of halal cosmetic and requirements for halal cosmetics. The second part examines relevant theories and reports on the empirical applications of these theories. The third section goes on to review the general literature on halal cosmetics intention, in order to identify gaps in the research. The final section of this chapter seeks to describe the research framework and develop hypotheses for the study.

2.2 Beauty premium

Our bodies and facial appearance play significant roles in present society (Gill et al., 2005; Turner, 2008). Physically attractive people can gain more opportunities to have a perfect match. In addition, the physical attraction also helps to gain advantages in all fields of life, it's especially true for women's careers (Hamermesh & Biddle, 1994; Härkönen, 2007; Sarlio-Lähteenkorva, Silventoinen, & Lahelma, 2004). People also feel that more physically attractive people are more intelligent, cooperative, dominant, social and higher in self-esteem (Andreoni & Petrie, 2008; Mulford, Orbell, Shatto, & Stockard, 1998). According to Aristotle,

“Personal beauty is a greater recommendation than any letter of reference”.

Comparative beauty is rewarded. Physically attractive people make more money than less or not attractive ones. This premium to beauty is reflected in Hamermesh and Biddle (1994) results that plain people earn less than good looking people. It is found that beautiful people are not awarded due to their behaviors, but due to the expectations of other people. Socially, people believe that attractive people are more cooperative. It is a false belief about attractive people that give them beauty premium (Andreoni & Petrie, 2008).

Beauty is rewarded in shape of beauty premium. Simply beauty premium means monetary rewards taken on the basis of physical attractiveness. It is a complicated phenomenon based on attractiveness stereotype that more attractive people are more social, more intelligent, warmer, more cooperative and more successful, this stereotype results in an extra

advantage to attractive people and they gain more money on the same job and same task against less or unattractive people. This whole phenomenon is given the name of “beauty premium”. Beauty premium is reality and researchers have consistently supported this, an experiment finds three channels about sizeable beauty premium: (a) attractive people are more confident and confidence increases wages (b) attractive people are more considered by employers due to their confidence; (c) just due to increased confidence physical attractive people have more improved oral skills, in turn, they gain a wage increment (Mobius & Rosenblat, 2006).

Beauty premium gained as a result of the contribution of multiple traits those are directly or indirectly linked with physical attractiveness as previous researchers show.

- ❖ Physically attractive people are more emotionally stable that’s lead to beauty premium (Umberson & Hughes, 1987).
- ❖ People generally believe that physically attractive people are more intelligent and active (Cialdini, 1984), but experiments show that actually there is no difference in intelligence level between physically attractive and less attractive people (Feingold, 1992).
- ❖ Physically attractive people are more social and feel less lonely and depressed (Feingold, 1992).
- ❖ Attractive people are more popular than less attractive people and other people like to interact with physically attractive people (Feingold, 1992).
- ❖ People like to share their personal information with attractive people (Brundage, Derlega, & Cash, 1976).

- ❖ People with more enhanced appearance are more likely to be reinforced than unattractive people (Gallucci & Meyer, 1984).
- ❖ Physically attractive people readily cope with psychological disturbances than unattractive people (Cash, Kehr, Polyson, & Freeman, 1977).
- ❖ Physically attractive people feel less guilty than unattractive people if both come across with the same crime (Efran, 1974).
- ❖ More beautiful offenders in sex related crimes are less dangerous than less beautiful offenders (Esses & Webster, 1988).
- ❖ When attractive people encounter a crime they found to receive more generous sentences than unattractive people (Desantts & Kayson, 1997).
- ❖ Attractive people always gain an advantage as they are more considerable even babies also prefer more beautiful faces, then less beautiful (Langlois et al., 1987).

On the basis of above social benefits physically attractive people are given more considerations in employee and employer relationship and gain more financial benefits that are called “beauty premium”. To gain this reality of the beauty premium expense on beauty products increases (Sarpila & Räsänen, 2011). Men and women both use cosmetics and beauty products to increase their beauty and gain beauty premium (A. L. Jones, Kramer, & Ward, 2014).

2.3 Cosmetics

Cosmetics have many diverse definitions but generally its means to “any article intended to be used by means of rubbing, sprinkling or by similar application to the human body for

cleansing, beautifying, promoting attractiveness, altering the appearance of the human body, and for maintaining health of skin and hair, provided that the action of the article on the human body is mild” (Mitsui, 1997). The modern definition of cosmetics is “any preparation which is applied to the skin, eyes, mouth, hair or nails for the purpose of cleansing, enhancing appearance, giving a pleasant smell or giving protection” (de Groot & White, 2001). More commonly, we can say that cosmetics are the products that enhance people’s appearance and make them good-looking. U.S. Federal Food, Drug, and Cosmetic Act, defined cosmetics as:

“(1) Articles intended to be rubbed, poured, sprinkled, or sprayed on, introduced into, or otherwise applied to the human body or any part thereof for cleansing, beautifying, promoting attractiveness, or altering the appearance, and (2) articles intended for use as a component of any such articles; except that such term shall not include soap.”

2.3.1 Purpose of Cosmetics

Cosmetics going to gain more importance day by day and their usage increased in daily life. It’s very difficult to state when first cosmetics are used. Archaeological excavations stated that cosmetics are used from the stone age (Pack, 2008). Earlier people used cosmetics for safety and protection from heat sunlight. In past people use oils moisturizing and paints to protect their bodies. Cosmetics also used for religious perspectives. Different types of woods and fragrances are used to make smoke that would defend against evil spirits. Further personal body paints also used to guard against evil. With the change of the era, these types of purposes of cosmetics are disappearing (Mitsui, 1997). In modern

societies cosmetics have varying usage from personal to environmental, to prevent aging, and in general to help people enjoy a more full and rewarding life (Mitsui, 1997; Pack, 2008).

2.3.2 Classification of cosmetics

Cosmetics companies produce and supply varieties of cosmetics products according to customer requirements. Any product that a customer uses for his health care, facial and skin treatment for outside appearance, or to maintain his health by cleaning and even utilization of natural and inorganic ingredients to prevent damage from the encompassing environment are altogether gone under cosmetics. Cosmetics are classified into following categories:

- 1) Skincare
- 2) Body & Oral Care Cosmetics
- 3) Makeup
- 4) Hair care
- 5) Fragrance

2.3.2.1 Skincare

Facial products are used on the face. Mainly they are used for cleansing, skin balance, and protection (Jain, Jain, & Jain, 2013). Skin cleansers, moisturizers, anti-aging products, sunscreen products, liposome's, and acne are fall in a skin care product category (Mitsui, 1997; Schmitt, 1992). In the global cosmetic segment, 27 % skin care products are used (State of the Global Islamic Economy, 2014 Report).

2.3.2.2 Body & Oral Care Cosmetics

Body care cosmetics include soap, body shampoo, sun care products, deodorant and hand washes. Whereas toothpaste, mouth fresheners, and washers are oral care product category (Jain et al., 2013; Mitsui, 1997). The share of the body and oral care cosmetics is 23 % in the total global cosmetic segment (State of the Global Islamic Economy, 2014 Report).

2.3.2.3 Makeup

Makeup is mostly used for the face. But nail enamel is also makeup. Base makeup and point makeups are two main categories of face makeup. Foundation, face powder, lipsticks, blushes, eye colors, eye pencils, and nail paints are fall in makeup product category (Matsuoka et al., 2006; Mitsui, 1997). In global cosmetic segment, 20 % makeup products are used (State of the Global Islamic Economy, 2014 Report).

2.3.2.4 Hair Care

Shampoos, damage hair treatment items, and styling agents in addition to everlasting wave agents and hair dyes are all comes in categories of hair care products. More categories of hair care include hair growth supporters and scalp treatments. Shampoos, rinses, hair mousses, hair liquids, hair color, hair bleaches, hair tonic, and scalp treatments are fall in the hair product category (Jain et al., 2013; Mitsui, 1997). In global cosmetic segment, 20 % share hair products are occupied (State of the Global Islamic Economy, 2014 Report).

2.3.2.5 Fragrance

Fragrances are mostly used on the body. Generally, perfumes are considered as fragrances, now many other fragrances are used like Eau de colognes (Jain et al., 2013; Mitsui, 1997). In the global cosmetic segment fragrances, cosmetics have 10 % share (State of the Global Islamic Economy, 2014 Report).

2.4 Halal

The word halal means permissible or lawful by Islamic laws (e.g Ambali & Bakar, 2014). Halal is an Arabic language word that's mean "permissible". In other languages specifically in English, it's taken only for food permissibility. The Islamic concept of permissibility covers all aspects of life (Kamali, 1991). "Haram" word is opposite (antonym) to "Halal". These both concepts of "halal" and "haram" are used to explain rules for food materials, drinking, and clothing, personal care, hygienic and cosmetic. According to Qaraḍāwī (1994), the meaning of "halal" is "permissible for consumption and used by Muslims whereas haram is anything that is unlawful or forbidden". There is a detailed explanation about halal and haram in Islamic law and considered to be serious matters. All stages from raw material sourcing, distribution of end products and up to delivery to consumers are covered by halal (Man & Sazili, 2010). According to (Corporation, 2015), if the products fulfill the following requirements then it must be considered as halal products.

- ❖ Should not include any animal or parts of the animal that is not permissible in Islam.

- ❖ Parts or components of halal animals are not allowed to be used if they are not slaughtered according to slaughtering rules prescribed by Islam (Shariah).
- ❖ Najs (filthy or unclean) material or components are not allowed to use.
- ❖ Safe material from the perspective of biology and chemical perspectives are allowed to use.
- ❖ Processing and manufacturing equipment are cleaned and safe from all types of Najs according to Shariah laws.
- ❖ Human flesh and blood are not allowed.
- ❖ Keep separate from all those things those are considered to be Najs or does not fulfill rules stated above, strictly follow at all stages of the supply chain.

2.4.1 Halal concept according to Quran

God (Allah) (S.W.T) create everything on earth for human beings and for the nourishment of human life. The concept of halal is also stated in Holy Quran as:

“It is He who has created all that is in the earth for you” (Quran 2:29).

Hence, everything is permissible except things those are not allowed by Allah and his beloved prophet Muhammad (PBUH) in his reliable and accurate Sunnah. What is permissible and what is not, it's only decided by Allah. No one else except Allah is able to make this decision. The reason behind lawfulness and prohibition is the only safety of human life from harmfulness. Muslims did not question and feel biased on laws or prohibition rules prescribed by Allah as explained in Quran:

“O ye who believe! Eat of the good things wherewith we have provided you, and render thanks to Allah if it is (indeed) He whom ye worship” (Quran 2:172).

It is our obligations to complete understand rules of permissibility because these are only for human will being. Going against to these rules is considering disobedience of Allah. Therefore, all Muslims have to follow all rules of halal and haram without any question. These Islamic laws are applicable to all Muslims all over the world without any discrimination on bases on creed or sex. A Muslims obligation is to follow all orders of Allah those his messenger told, as Allah says:

“O ye Messengers! Eat of the good things, and do right. Lo! I am aware of what ye do”
(Quran 23:51).

Muslims have to consume only halal food that is safe, clean and hygienic. Halal is a concept that covers all aspects of cleanness and safety from food preparation to consumption. It's explained in verses of Allah's word as

“He hath forbidden you only carrion, and blood, and swine flesh, and that which hath been immolated to (the name of) any other than Allah. But he who is driven by necessity, neither craving nor transgressing, it is no sin for him. Lo! Allah is Forgiving, Merciful”

(Quran 2:173).

This verse of Quran clearly explains what Muslims can consume and what is not. These verses of Quran are even more understandable with a detailed and valid explanation by Islamic scholars. For instance, the logic behind the prohibition of dead animals flesh and blood because they are not fit for the human body. When an animal dies there decaying process starts that become the reason of harmful chemical formation. Human metabolism and development process can be negatively affected if we drink blood because blood contains harmful chemical and toxins. Allah in Quran also explains these types of authentic reasons of prohibition as:

“And verily in cattle (too) will ye find an instructive Sign. From what is within their bodies between excretions and blood. We produce, for your drink, milk, pure and agreeable to those who drink it.” (Quran 16:66).

This verse clarifies that in Islam Allah only allow consuming what is safe and healthy for humanity. Milk is allowed from halal animals when the animal is alive. When that's permissible animal died his milk is also not allowed because it contains harmful components.

2.4.2 Halal concept according to Hadith

The hadith of the Holy Prophet (PBUH) explain halal rules for all matters and for all nations without any doubt and discrimination. Prophet (PBUH) even explains rules of slaughtering animals to make it lawful for eating halal food. Related to this concept hadith of our Holy prophet (PBUH) is:

“Verily Allah has prescribed proficiency in all things. Thus, if you kill, kill well; and if you slaughter, slaughter well. Let each one of you sharpen his blade and let him spare suffering to the animal he slaughters” (Hadith No.17 of Imam Nawawi by Sahih Muslim).

We cannot negate the fact that detailed information about halal food is found in Islam. As a Muslim, we must follow all the guidelines especially in terms of slaughtering. Prophet (PBUH) of Allah said to Muslims:

“Use whatever causes blood to flow, and eat the animals if the Name of Allah has been mentioned on slaughtering them...” (“SahihBukhar” I, Vol.3, Book 44, No 668).

Above mentioned hadith clarify that it’s very important in Islam to fulfill all requirement in processing food to make it halal. The narrated hadith mentioned above have clearly clarified the rules and processes in slaughtering animals to be lawful for eating by Muslims.

Some of the hadith of the Holy Prophet (PBUH) also addressed those permissible and non-permissible foods as well products for consumptions.

“Allah’s Messenger forbade the eating of the meat of beasts having fangs” (see: Sahih Bukhari, Vol. 7, Book 7, No 4350).

According to this hadith, we may have noted that lots of items, drinks and foods are lawful, where a number of products are not allowed such as like liquor and pork etc. We are sometimes getting confused on whether certain foods or drinks or products are halal or haram. In this situation, the hadith of the Holy Prophet sheds light on this where he said:

“Halal (lawful) is clear and Haram is unclear (unlawful); in between these two are certain things that are suspected (Shubha). Many people may not know whether those items are Halal or Haram. Whosoever leaves them, he is innocent towards his religion and his conscience. He is, therefore, safe. Anyone who gets involved in any of these suspected items, he may fall into the unlawful and the prohibition. This case is similar to the one who wishes to raise his animals next to a restricted area, he may step into it. Indeed, for every landlord, there is a restricted area. Indeed, the restrictions of Allah are the unlawful (Haram)” (‘Sahih Muslim’, No: 2996).

Products that are not prepared according to Islamic Shariah law are prohibited for Muslims all over the world. On the other hand, products that are produced according to Islamic Shariah law are the source of energy for the human body because the human body needs energy for development, for thinking, for working and for movements. Thus, they are permitted by Quran and Sunnah for the benefits we can obtain from them, otherwise, they are prohibited if they are not prepared in the right manner, condition and method for consumptions simply because of the harmful effects. we may encounter from eating, drinking and using them.

2.5 Halal cosmetics

According to Malaysian halal cosmetic standard halal cosmetic means:

“Halal cosmetics are products that must not have any human parts or ingredients thereof; not contain any animal forbidden to Muslims or are not slaughtered according to Syariah law; no genetically modified organism (GMO) which are decreed as najis; no alcohol from alcoholic drinks (khamar); no contamination from najis during preparation, processing, manufacturing and storage; and safe for consumer”.

2.5.1 Halal cosmetics principles

Halal cosmetics principles define rules and regulations for manufacturing companies that ensure halalness of cosmetics products. According to UAE technical committee following are the four principles of halal cosmetics:

- 1) Halal and Non-Halal
- 2) “Najis” and “Mutanajis”
- 3) Safety
- 4) Quality

2.5.1.1 Halal

Most important aspect of halal cosmetics is that it must be halal in Islam. Arabic meaning of halal is “permissible” and “lawful”. Another definition of halal is anything either action or material that is permissible in Islam. In opposition to halal, haram is anything or material that is not allowed to be used according to Shariah. Before deciding things to be halal, it’s vital to ensure that material used in cosmetics preparation and processing is also halal.

2.5.1.2 Najis and Mutanajis

It is a second principle to consider cosmetics to be halal. “Najis” its Arabic word with meaning “filth”. Muslims are not allowed to use items those contain Najis. There are many categories of Najis. Mainly najis are classified into three categories. The first mughallazah mean “heavy or severe najis”, the second mutawassitah mean “medium najis” and the third one is mukhaffafah mean “light or tolerable najis”.

2.5.1.3 Safety

Cosmetic to be considered as halal must be safe. To ensure the safety of halal cosmetics, it must be produced and processed according to Shariah law.

2.5.1.4 Quality

Halal cosmetics are superior in quality against other cosmetics. Cosmetics are not recognized as halal until it cannot fulfill the standard requirements of quality.

2.5.2 Requirements for halal cosmetics

For the production of halal cosmetics, there are some general and specific requirements. Cosmetics manufacturing companies are bound to fulfill the stated requirements for the production of halal cosmetics. UAE technical committee indicates general and specific requirements for halal cosmetics production.

2.5.2.1 General requirements

- ❖ Haram, Njis and Mutanajis material cannot be used in the production of halal cosmetics.
- ❖ Organizations should care about (a) technology, equipment, materials, packaging, and labeling cannot be contaminated by najis at any stage of production (b) the final product does not become mutanajis at any stage after production (such as the storage, transportation, distribution, display etc.) until it is delivered to the customer. In order to accomplish this organization shall take the required measures to prevent mutanajis. Examples of such actions are effective separation, maintain cleanliness etc.
- ❖ Safety and security proofs must be provided by formal tests and documentations. Halal cosmetics should fulfill the desired claims of quality and superiority.
- ❖ Productions of halal cosmetics are under good manufacturing practices guidelines which are developed by the Standardization Organization of the Cooperation Council for the Arab States of the Gulf. For example, ISO 22716.
- ❖ Nonhalal manufacturing facilities are not allowed to be used in the production of halal cosmetics at any stage of production.
- ❖ Ensure traceability of halal cosmetics distinctively at any stage of production. This traceability is according to published standards
- ❖ If questions arise about quality, safety, technology, equipment, materials, packaging, labeling, and processing or any other issue of halal cosmetics then it will not have considered being halal then recalled the same products available in the market.

2.5.2.2 Specific Requirements

- ❖ In addition to the common requirements, the organizations should keep an eye on the specific requirement.
- ❖ Many different types of ingredients are used in the production of halal cosmetics. For example, as water, soil, agro-ingredients, animals, and plants. These raw materials and ingredients are according to Shariah law
- ❖ These different types of ingredients must not be haram, Mutanajis or Najis.
- ❖ Halal cosmetics term is only used when it fulfills all requirements and at all stages from production to consumption and according to Shariah law including advertisements of products to recognition bars it should in compliance with ethical Shariah laws. In addition, halal cosmetic follow label compliance requirements set by UAE.S/GSO1943 (cosmetic products- cosmetic products safety requirements).
- ❖ Packaging materials also strictly follow Islamic laws and not have any haram and Njis material. In addition, follow packaging compliance requirements set by UAE.S/GSO1943 (cosmetic products- cosmetic products safety requirements). The design of packing material must be in compliance with ethical, and Shariah laws plus it's in tune with target market's culture.

2.6 Research Theoretical Background

This research, the theoretical background is integrated with three types of theory, namely: theory of reasoned action (TRA), the theory of planned behavior (TPB) and behavioral reasoning theory (BRT). The following statement will be described in the related theories use in this research.

2.6.1 Theory of reasoned action (TRA)

The TRA, by Fishbein and Ajzen (1975) was originally introduced in the social psychology field, and widely used to describe the human behavior. This theory hypothesizes that the behavior is predicted by the intention of an individual to perform the behavior. The intention is predicted by two factors, (1) through the attitude of individual to behavior and (2) through the opinion of the people in the social environment, called subjective norm (Fishbein & Ajzen, 1975) in which the relationship is illustrated in Figure 2.1. The key principles in the TRA (Figure 2.1) is that the intention of the behavior of an individual in a particular context depends on the attitude and subjective norm towards doing the target behaviors (Fishbein & Ajzen, 1975).

Attitude towards behavior reflects the individual assessment or a general feeling against the target behavior. It shows a positive or negative relationship to individual assessment about doing the behavior. The attitude toward a behavior is a result of the beliefs about individual behavior and the decision resulting from such behavior. As a consequence, the theory hypothesizes that the intention to perform a behavior will be greater when there is a positive rating to the performed behavior (Ajzen, 1991).

In such context, the subjective norm is defined as an individual seen social pressure to do or not to do the target behavior. It is a combination of the normative beliefs of an individual behavior to observe others (Fishbein & Ajzen, 1975). Normative beliefs show the perception of the influence of the opinion between the groups of reference while the motivation needs to comply with an individual level that needs to show compliance with

the necessity of the antecedent (Mathieson, 1991). Thus, the theory proposes that an individual always acts according to their perception of what people think they have to do. Their intention to practice certain behavior may be affected by people who are close to them. TRA has been widely used to explain individual 's behavior. The theory postulates that individual behavior is influenced by attitudes and subjective norms.

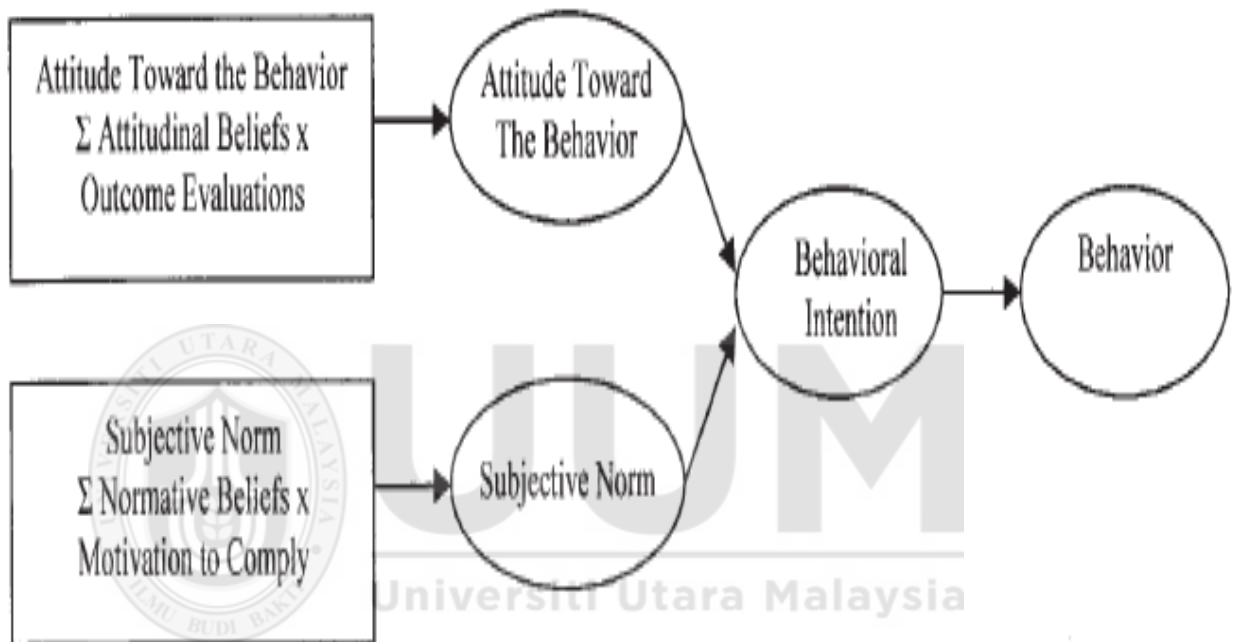


Figure 2.1
Theory of reasoned action (TRA)

2.6.1.1 TRA in cosmetics settings

The TRA has been successfully applied in the cosmetics domain in general or in the halal cosmetics domain in particular to predict consumer purchase intentions. For example, Abd Rahman et al. (2015) conducted a study to identify the factors that influence consumer intentions to buy halal cosmetics products in Malaysia, constructs were developed based on TRA and some extra important variables such as (knowledge and religiosity) were

incorporated. This study showed that the TRA has the ability to explain factors that influence halal cosmetics buying intentions.

In another study, TRA was used by (Tajeddini & Nikdavoodi, 2014) to examine the predictors that affect grooming or personal care products buying intentions in Sweden. The findings of this study showed that consumer intentions towards grooming or personal care products are influenced by their attitude, subjective norm, and consumer innovativeness. In addition, Kyung (2012) has applied TRA in the cosmetics domain by collecting data from 300 female students studying at Ritsumeikan Asia Pacific University in Japan. This study found that TRA is supported and it has the ability in predicting individual's behavioral intentions to purchase facial care and beautification products. Also, this study found that individual behavioral intentions towards cosmetics and personal care products are not influenced by their subjective norm.

Moreover, another past study related to it (Nikdavoodi, 2012), who conducted a study on a number of Women in Sweden have used TRA to determine factors that influence consumer intentions to buy cosmetics products. He points out that the relationship between attitude or consumer innovativeness and purchase intentions is significant and positive. Also, the relationship between subjective norm and cosmetic purchase intentions is insignificant. The findings of the study suggested that TRA provides a better explanatory power to predict consumer intentions towards cosmetic products. In addition, this study showed that TRA model provides a good fit to the data.

In a similar vein, Sukato and Elsey (2009) have conducted a study in Thailand to examine male buying behavior in skin care products. They employed TRA as a theoretical framework. The results of this study showed that TRA is appropriate to explain cosmetic buying behavior of males towards skin care products in a Thai setting. Cheh (2014) confirmed that TRA is a reliable influential predictive framework to explore the factors (price consciousness, credibility, self-concept and brand personality). Moreover, to investigate how these factors influence the attitude of Malaysian Gen-Y males and their purchase intentions towards men's facial care products. The following Table 2.1 summarizes the past studies that have been used TRA in the cosmetic setting.

Table 2.1

Summary of past studies that have been used TRA in Cosmetic setting

Author	Samples	Sampling technique	Country	Constructs	Underpinning theory
Kyung (2012)	300female students	Probability sampling	Japan	Attitude, Subjective norm, consumer innovativeness, Purchase intention	TRA
Nikdavoodi (2012)	400 females	Non-Probability	Sweden	Attitude, Subjective norm, consumer innovativeness, Purchase intention	TRA
Tajeddini and Nikdavoodi (2014)	400 women	Non-Probability	Sweden	Attitude, subjective norm, consumer innovativeness, Purchase intention	TRA
Abd Rahman et al. (2015)	Muslims respondents	Non-Probability	Malaysia	Attitude, Knowledge, Religiosity, Purchase intention	TRA

Sukato and Elsey (2009)	422 males	Non-Probability	Thailand	Attitude, Product attributes, Self-image, Normative influence, Purchase intention, Purchase	TRA
Cheh (2014)	400 male respondents	Non-Probability	Malaysia	Price consciousness, Credibility, Self-concept, Brand personality, Attitude, Purchase intention	TRA

2.6.1.2 Limitations of TRA

Biddle and Mutrie (2008) concluded that: (1) TRA is a one-way model, without taking into account the possibility of interaction; (2) TRA emphasizes only cognitive factors and ignores other potentially important variables; (3) TRA only predicts new behavior (the intention of behavior at a certain moment) rather than habitual behaviors; (4) TRA explains only behavior controlled by willingness; (5) There are yet no precise tools for the measurement of behaviors; (6) TRA focuses on individual behaviors, and fails to explain optional behaviors; (7) TRA fails to address the instability of intention, which may change from time to time.

2.6.2 Theory of planned behavior (TPB)

To overcome TRA inadequacy Ajzen (1991) developed TPB which is the extended version of TRA as shown in Figure 2.2. According to (Ajzen, 1991) the behaviors and behavioral intentions are explained by the TPB by considering persons volitional and non-volitional

control. Consumer behavior researchers think that for examining and investigating behavioral phenomena TPB is more realistic.

TPB is an extended version of TRA (Fishbein & Ajzen, 1975) with an additional belief (i.e., Perceived behavioral control) making the determinants of intention consists of attitude, subjective norm, and perceived behavioral control as exhibited in Figure 2.2. The theory can measure how a person 's actions are guided. It predicts the development of a particular behavior, provided that the behavior is intentionally performed because the behavior could be thoughtful and planned.

Figure 2.2 showcases that the three antecedents in the TPB have direct and indirect influence, through a variety of mechanisms of behavior intention, over behavior. Perceived Behavioral Control is adhered to effect both the intention and behavior (see Figure 2.2). A meta-analysis has been carried out by Christopher J Armitage and Conner (2001), in which the result proves that the TPB is an effective theory. The rationale behind the addition of perceived behavioral control that allows the prediction of uncontrolled behavior is that it completes the volitional control. In regards with this, in the ability of perceived behavioral control to influence the intention, Ajzen (1991) justified that the importance of Subjective Norms, Attitude, and Behavior Control is seen in the expectations that this intention is aimed at changing behavior and situations.

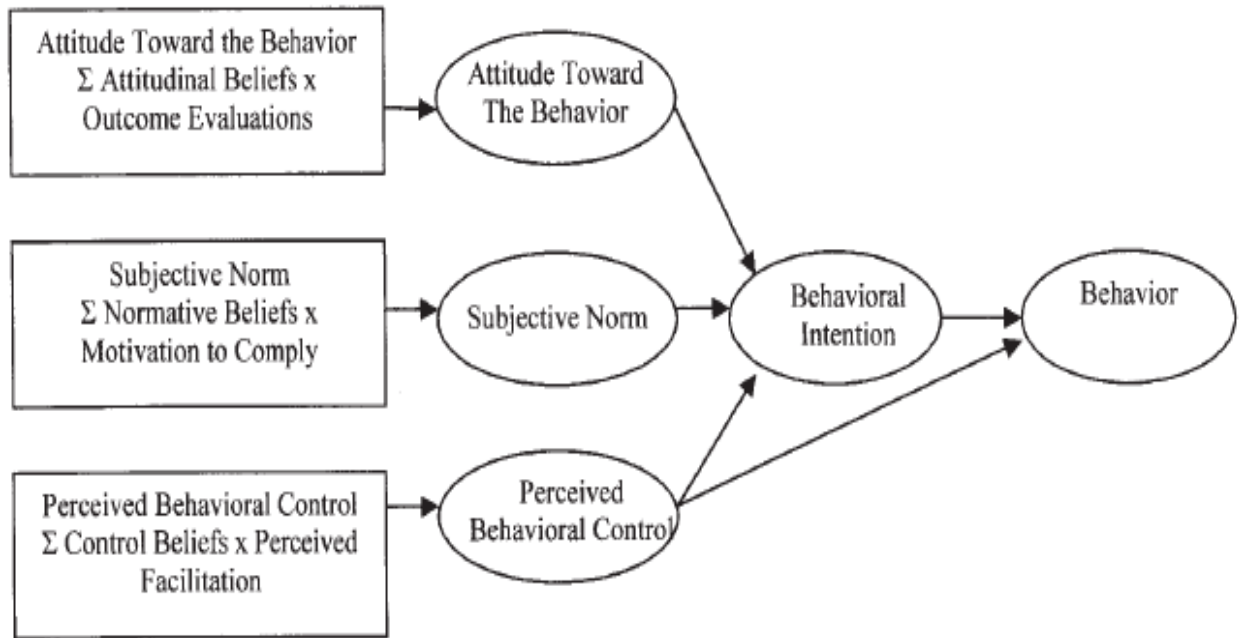


Figure 2.2
Theory of planned behavior (TPB)

2.6.2.1 TPB in Cosmetics setting

The TPB has been successfully applied to predict consumer intentions towards cosmetics in general or halal cosmetics in particular. For example in Pakistan, N. U. Ansari and Mohammed (2015) used TPB to determine consumers purchase intentions towards halal cosmetics and personal care products. This study reveals that attitude, subjective norm, halal awareness, and religiosity have a significant effect on consumer's intention to purchase halal cosmetic and personal care products, while perceived behavioral control towards cosmetics products appeared to be of minor significance in clarifying halal cosmetics purchase intention. The outcomes gave adequate confirmation to support the theoretical underpinning of TPB.

Moreover, A. Aziz et al. (2013) have used TPB to determine factors that influence consumer intentions towards halal cosmetics in Malaysia. This study found that attitude; subjective norm, perceived behavioral control, safety, purity and knowledge factors have an influence on halal cosmetics products intentions. Purity has been recognized as the main predictor that affects the consumer's intentions towards halal beautification products. In a similar vein, Kaur and Osman (2014) asserted that TPB is appropriate in determining halal cosmetic buying behavior of Malaysian working women's. In total 425 valid questioners were collected. The study results indicate that working women's intentions are significantly determined by three factors which are attitude, subjective norm, and perceived behavior control.

In another study, TPB was used by (A. J. C. M. Hashim & Musa, 2013) to examine the factors that affect halal cosmetics buying intentions. The findings of this study found that TPB is supported and TPB model provides a good fit to the data. Yeon Kim and Chung (2011) conducted a study to identify the factors that influence consumer's intentions towards organic cosmetics in the USA, constructs were developed based on TPB and some extra important variables such as (health consciousness, environmental consciousness, appearance consciousness and past experience) were incorporated. The findings of the study suggested that TPB provides a better explanatory power to predict consumer intentions towards organic cosmetics.

In concurrence with (Yeon Kim & Chung, 2011), Nguyen (2014) used TPB to examine effective factors that affect young consumers behavioral intentions towards organic

cosmetics products in Vietnam. Data were collected from 150 consumers for data analysis. The results indicate that attitude, subjective norm, and perceived behavior control were significant predictors of organic cosmetics buying intention. In addition, it is clearly noted by Nguyen (2014) that TPB is appropriate in cosmetics settings.

Bachleda, Fakhar, and Hlimi (2012) extended TPB model to explore that factors affecting behavioral intention towards sunscreen products. They found that attitude, subjective norm, and perceived behavioral control play an important role to determine young Moroccan adult's behavioral intentions towards sunscreen products. However, the relationship between price and purchase intentions of sunscreen products is insignificant. Moreover, this study showed that TPB model provides a good fit to the data. Holst and Iversen (2011) examined purchase intentions for personal care products without endocrine disrupting chemicals in Denmark and Germany. They extend the TPB by adding the self-identity construct in the original framework. Empirical findings support the revised version of TPB in both countries.

Expounding further on the application of the theory of planned behavior in cosmetic settings, J. Strauss and Kleine Stüve (2016) conducted a study in Germany to investigate intention to buy organic hair care products. In total 306 questionnaires were collected for data analysis. The findings of this study show that consumer's intention to buy organic hair care products is significantly influenced by attitude and perceived behavior control. Furthermore, these factors can be predicted by environmental consciousness, health consciousness, availability, and trust.

In another research by Saleem and Recker (2014), the TPB was employed to study what influences consumer intentions to buy organic personal products. They collect data from German female consumers by employing convenience sampling technique. The results of this study indicate that consumer's intention to buy organic personal care products is significantly influenced by attitude, environmental knowledge, and past experience. Moreover, AnFerraz (2011) extended the TPB by integrating self-concept construct to examine men's purchase intention of shampoo. Extended TPB is empirically validated in Portugal sample (n=282). The following Table 2.2 summarizes these past studies that have been used TPB in cosmetics setting.

Table 2.2
Summary of past research's that have been used TPB in Cosmetics setting

Author	Sample	Sampling technique	Country	Constructs	Underpinning theory
Yeon Kim and Chung (2011)	USA consumers over the age of 18	Non probability	USA	Attitude, Subjective norm, perceived behavioral control and past experience.	TPB
A. Aziz et al. (2013)	100 university students	Not available	Malaysia	Attitude, SN, PBC,, knowledge, purity and safety.	TPB
A. J. C. M. Hashim and Musa (2013)	Muslim Women	Non probability	Malaysia	Attitude, subjective norm and PBC	TPB
N. U. Ansari and Mohammed (2015)	236 Muslim Consumer	Not available	Pakistan	Attitude, subjective norm, religiosity and halal awareness	TPB

Nguyen (2014)	150 Young men and Women	Non probability	Vietnam	Attitude, subjective norm, perceived behavioral control and perceived risk	TPB
Kaur and Osman (2014)	440 Working women	Non probability	Malaysia	Attitude, subjective norm and perceived behavioral control	TPB
Bachleda et al. (2012)	380 Young adults	Probability	Morocco	Attitude, subjective norm, perceived behavioral control and price.	TPB
Holst and Iversen (2011)	296 Danish and 136 German Consumers	Non probability	Denmark and Germany	Attitude, subjective norm, perceived behavior control and self-identity	TPB
J. Strauss and Kleine Stüve (2016)	306 respondents	Non probability	Germany	Appearance, health, environment, attitude, price, trust, packing, availability, perceived behavior control and purchase intention	TPB
Saleem and Recker (2014)	Female 207	Non probability	Germany	Environmental knowledge, Past experience, Product expertise, environmental consciousness, health consciousness, Animal wellbeing concern, Attitude,	TPB

				Subjective norm, perceived behavior control and Purchase intention	
Ferraz (2011)	282 men	Non- probability	Portugal	Attitude, Subjective nor, Perceived behavior control and Self-concept	TPB

2.6.2.2 Limitations of TPB

Although TPB (Ajzen, 1991) suggested that three factors (attitude, subjective norm, and perceived behavioral control) determine human behavior, Taylor and Todd (1995b) summarized other research (such as Richard P Bagozzi, 1981, 1982; Shimp & Kavas, 1984) and reported that TPB was criticized because of the way it combined multi-dimensional beliefs into a uni-dimensional construct. Such a monolithic set of beliefs may not be consistently kept in line with antecedents like attitude or subjective norm (Richard P Bagozzi, 1982; Shimp & Kavas, 1984; Taylor & Todd, 1995a, 1995b). Thus, when researchers use TPB to study individual behavior, they need to consider whether or not there are any pre-determinants impacting upon attitude, subjective norm, or perceived behavioral control.

Hence, (Taylor & Todd, 1995a) proposed belief decomposition approach that has several advantages over a uni-dimensional set of belief structural model like TPB. Firstly, decomposition approach includes several antecedents of intention, stressing the particular factors that influence intention. Secondly, it offers a set of reliable beliefs to be applied to various situations. This overcomes the problems of TPB model, i.e. difficulty in

manipulating. Thirdly, this approach avoids the problems of combining constructs that act in different directions together, by allowing opposing factors to cancel out (Taylor & Todd, 1995a). Due to above advantages, Taylor and Todd (1995a) demonstrated that decomposition approach can more accurately evaluate human behavior. Consumer behavioral scholars recommended that researchers should consider belief decomposition approach if they are looking for more comprehensive perceptions of intentions (H.-F. Lin, 2007; Shih & Fang, 2004; Taylor & Todd, 1995a, 1995b).

2.6.3 Behavioral Reasoning Theory (BRT)

The main goal of numerous theorists in decision making and social sciences is to understand the basic determinants of behavior. For an understanding of behavioral determinants, to date behavioral intention models base on Fishbein and Ajzen (1975) theory of reason action and Ajzen (1991) theory of planned behavior. Theorists of these models postulate that behavioral intention has three antecedents, such as attitude, subjective norm and perceived behavioral. Remarkably, in decision making and social sciences, TRA and TPB have received a healthy support and considered worthwhile theories in behavioral sciences.

However, these models do not discuss theoretically whether or how “reason” concepts lead towards motivational mechanism (Westaby, Fishbein, & Aherin, 1997). In order to understand the motivational mechanism of individual behavior as well as to overcome the shortcomings of TRA and TPB, Westaby (2005a) designed behavioral reasoning theory

(BRT). The BRT is an integrated theory (Westaby, 2005a) that incorporates concepts from the TPB (Ajzen, 1991).

The main premise of the BRT is that context-specific reasons are an essential component in understanding the association between belief concepts, global motives, intentions, and behaviors (Westaby, 2005a). Global motives include attitude, subjective norm, and perceived behavioral control as precursors to intention, and as mediators to belief concepts (Westaby, 2005a); all concepts contained in the TPB. The integrated BRT includes context (Westaby, 2005a), an important distinction from the TPB (Ajzen, 1991). Context-specific reasons refer to an individual's rationale for engaging in specific behaviors (Westaby, 2005a). The reasons concept is inclusive of a wider breadth of contextual factors to explain behavior (Westaby, 2005a). Individuals use reasons to defend their decisions about specific behaviors. There are three types of reasons: (1) anticipated reasons to justify future behavior; (2) concurrent reasons to explain current behaviors performed or not performed; and, (3) post hoc reasons used to explain past behaviors performed or not performed.

Conceptually, there is a difference between beliefs and reasons. In the TPB (Glanz, Rimer, & Viswanath, 2008), an individual's beliefs and values relate to an individual's perception that a specific behavior will result in an outcome or consequence. Individuals who perceive outcomes in a positive and important way tend to be more motivated to act on the specific behavior (Glanz et al., 2008). Therefore, beliefs and values are broader representing various thought processes. In contrast, reasons are specifically focused on explanations individuals use to defend their behavior (Westaby, 2005b). Beliefs and values are

theoretically linked to reasons or an individual's explanation for behavior (Westaby, 2005a). BRT postulate that global motive and intention is determined by reasons because they help individuals that they rationalized or justify their decisions and enhance or protect their self-worth.

Figure 2.3 represents a visual overview of BRT. As compare to other behavioral intentions models (TRA/TPB), BRT offers a complete and comprehensive understanding of individual's behavioral intentions by incorporate and link context-specific reasons with values, global motives, and intentions (Westaby, 2005a).

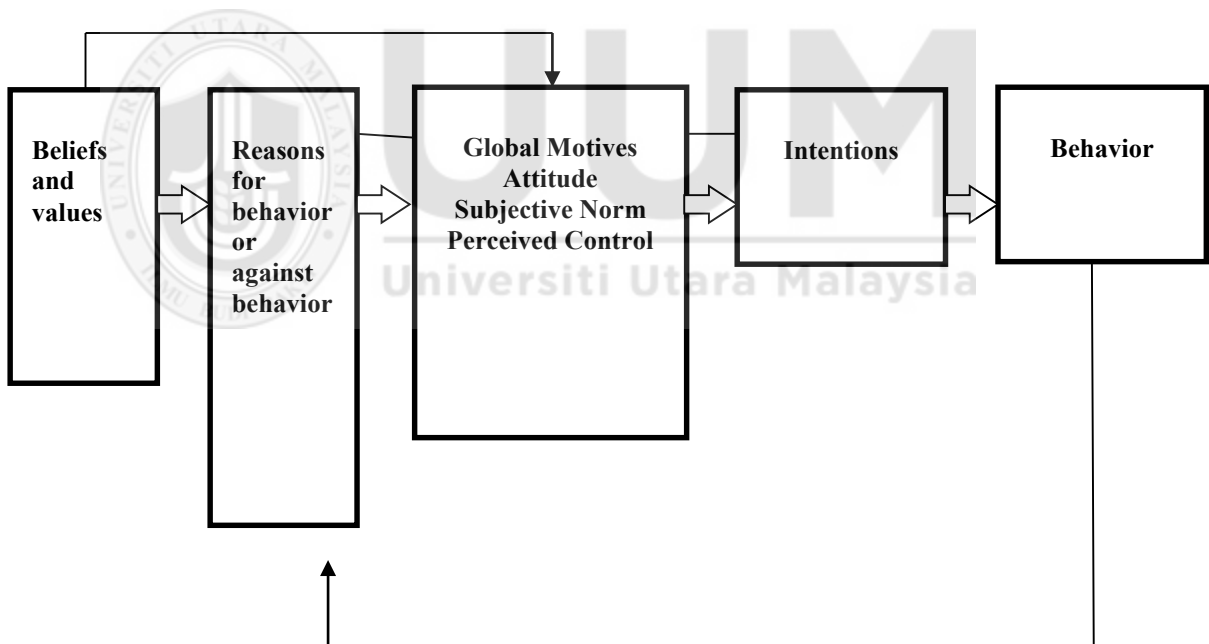


Figure 2.3
Behavioral reasoning theory (BRT)

2.6.3.1 BRT assumptions

- ❖ BRT does not assume that all set of beliefs such as behavioral beliefs, normative beliefs, and control beliefs are leads towards behavior prediction.

- ❖ In social and decision-making science people search for such type of set of reasons that they rationalized or justify their decisions and enhance or protect their self-worth.
- ❖ For better and comprehensive understanding of human behavior context-specific reasons are very important because they contribute towards global motives and intentions.
- ❖ BRT theory postulates that reasons significantly affect global motive and behavioral intentions because they assist people to defend and justify their actions, which enhance and secure their self-worth. Westaby (2005a) stated that “reasons can also help individuals make sense of their world by providing them with causal explanations for their behavior, the behavior of others, and causal relationships in their environment.”
- ❖ In automated processing, reasons may be skipped
- ❖ To predict human behavior in social psychology global motives (i.e. attitude, subjective norm and perceived control) are very important.
- ❖ BRT does not presume that reasons are unbiased and rational.

2.6.4 TRA, TPB and BRT Comparison

Theory of reasoned action includes only the core concept of behavior and attitude and subjective norms, attitude and behavior of individuals for their own implementation of the act good or bad evaluation; subjective norms is his most important people think he should

or should not implement perception of such acts; theory of planned behavior core concepts include behavioral attitude, subjective norms, and perceived behavioral control, behavior and attitude is an individual to perform a specific behavior like or do not like the assessment of the degree; subjective norm refers to the individual in the decision whether perceived to perform a specific behavior when social pressure, it reflects the impact of significant others on individual behavior or group decision-making; perceived behavioral control refers to the individual perception. The degree of implementation of easy or difficult a particular behavior.

Behavior reasoning theory core concept of beliefs and values, reasoning, overall motivation, which refers to the belief that a person on his or her own subjective probabilities world discernible aspect of the judgment; people use to explain their reasoning is the expected behavior of a particular subjective factors; attitude, subjective norms, and perceived behavioral control is a major determinant of intention, so these factors collectively referred to as the overall motivation.

Theory of reasoned action only applies to predict completely under the volitional control of behavior, if applied to the non-volitional control of behavior, predict reduced, so that the scope of application of the theory of small. Therefore, in a later study, we added a new variable to predict - perceived behavioral control, established a theory of planned behavior so that you can expand the scope of application of this theory to improve its predictive power. Behavior reasoning theory is based on the traditional model of behavior intention to join the reasoning, beliefs, and values of variables, and the attitude, subjective norm and

perceived control summarized as overall motivation. Relationship behavior reasoning theory of core variables has a new hypothesis, better able to explain the behavior of new, increased predictive power of behavior.

2.6.5 Systematic review of behavioral competing theories and models

Theory choice was the main problem in marketing and consumer behavior research. Although Islamic marketing has existed for a number of years, but as of today, there is still lacked theoretical support for understanding and explaining the Muslim context specific consumption behavior. In short words, there is no right theory for Muslim consumption behavior study. Therefore, past researchers employed different theories to study Muslim consumption behavior (i.e. Abd Rahman et al., 2015; N. U. Ansari & Mohammed, 2015). The purpose of this review is to find out the most appropriate theory for this study as well as to identify new avenues of research for halal themes by presenting a systematic literature review.

2.6.5.1 Methodology

To evaluate behavioral competing theories and models in the halal domain and to find out new gaps for halal themes, this study adopts the systematic process of a literature review. One of the benefits of undertaking the systematic review approach is getting more insights about the breadth of research and theoretical background in a particular field. Systematic reviews are pivotal to know the level of previous research that has been undertaken and to understand about the shortcomings and new avenues of research in the field (Okoli & Schabram, 2010). The systematic process means locating, selecting, evaluating, analyzing,

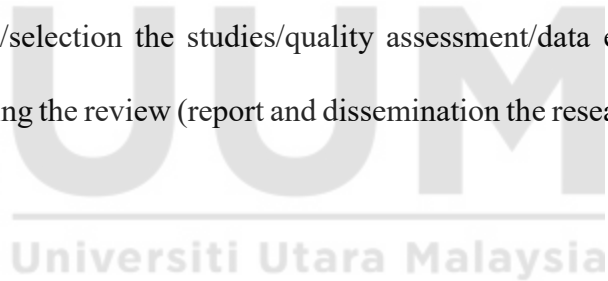
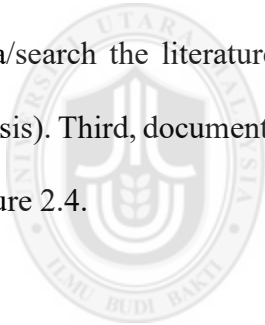
synthesizing and organizing the results of the relevant and suitable studies in a way that let the researchers be drawn understandable and logical conclusions about what is contributing to the knowledge and what is yet to be contributed to the knowledge. In order to review the behavioral competing theories and models in halal consumer behavior domain and identify new gaps in halal theme, this study considers all paper that has been published between January 2000 to December 2016 by using the Emerald Full-text database journals.

It is essential to identify appropriate search term in any electronic database search. “Keyword” approach was used because it was commonly practiced by the past researchers to identify previously published related literature (Schibrowsky, Peltier, & Nill, 2007). To find out titles and abstracts, the keywords employed included halal purchase intention, Muslim purchase intention, halal food intention, Islamic banking intention, Muslim consumers, Halal food, Islamic Finance, halal cosmetic, Muslim consumer, halal consumption, theory of reasoned action, theory of planned behavior, technology acceptance model and decomposed theory of planned behavior were used.

According to (Ngai, 2003; Nord & Nord, 1995) to disseminate new findings and acquire information academic researchers generally use journals because they represent the highest level of research. It is a general belief of the researchers that other scholarly works such as reprinted articles, book reviews, commentaries, research notes, unpublished working paper or articles representing research in progress do not make new or noteworthy contributions to the knowledge development. So that type of scholarly literature was excluded. To make sure that the research process did not ignore any relevant literature and identify additional

papers reference list of the papers were also checked that were initially retrieved besides the keyword searches (Denizci Guillet & Mohammed, 2015).

In this research, the researcher adopted eight fundamental processes of conducting a systemic literature review. Such as research purpose and objective, develop a research protocol, establish relevance criteria, search and retrieve literature, selection of studies, quality assessment, data extraction, synthesis of studies. These processes are underlain by three phases that have been adopted from (Okoli & Schabram, 2010; Thomas, Ciliska, Dobbins, & Micucci, 2004; Tranfield, Denyer, & Smart, 2003). First, planning the review (research purpose/research protocol). Second, conducting the review (apply the criteria/search the literature/selection the studies/quality assessment/data extraction and synthesis). Third, documenting the review (report and dissemination the research) as shown in Figure 2.4.



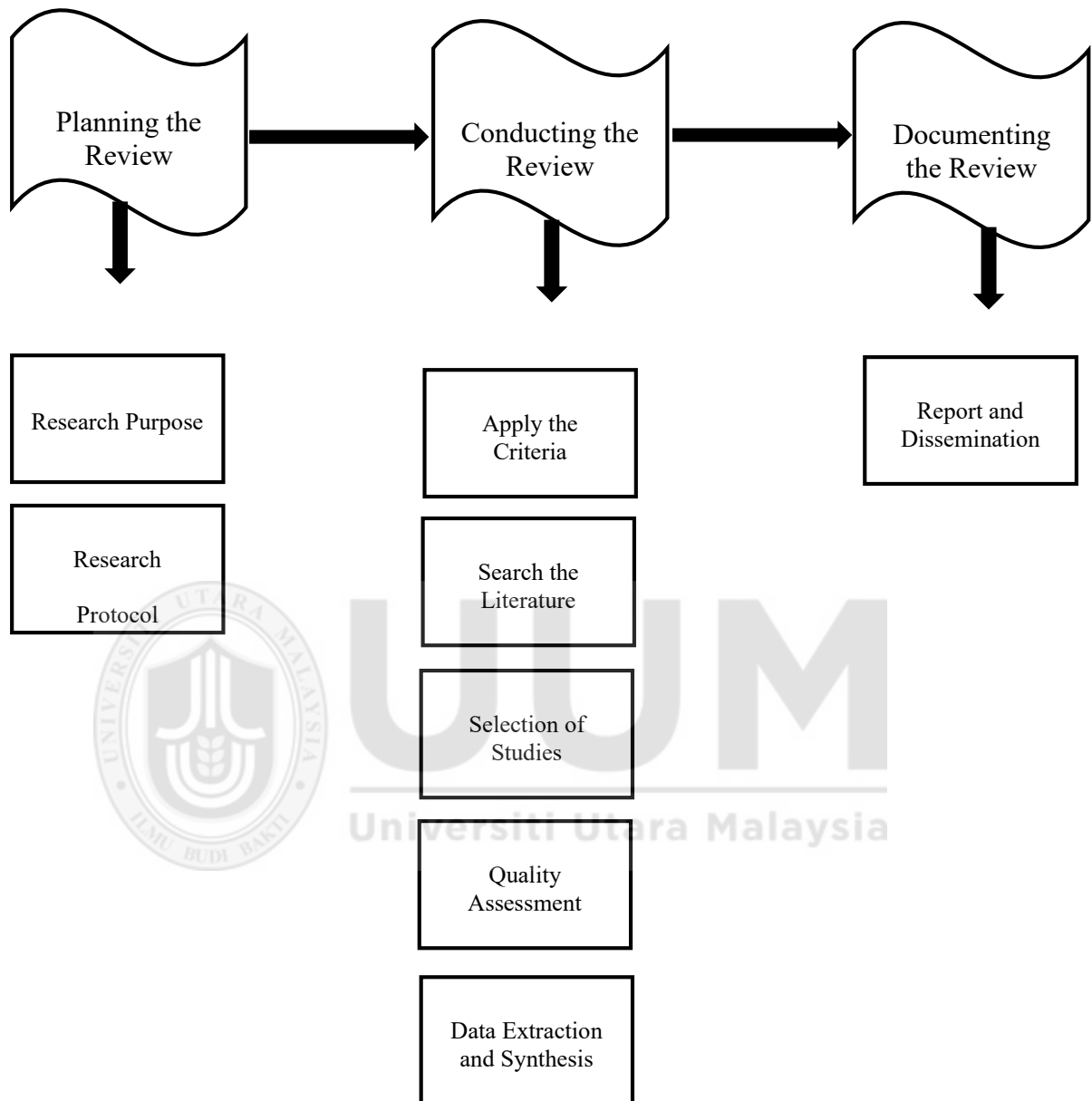


Figure 2.4
Research approach and phases

2.6.5.2 Material and outcome

The researcher retrieved 637 all references from the emerald advanced database. Under halal theme 342 papers screened and 295 papers were excluded that not cover the halal

theme. From 342 papers researcher excluded 310 papers that not identify any theoretical underpinning. Hence, 32 remaining paper were identifying and investigated for the present study as shown in Table 2.3.

Table 2.3
Identified and investigated papers

Author	Context	Country	Theory	Purpose/Findings
Azam and Azam (2016)	Muslim /Halal	Saudi Arabia	TPB	To examine factors that determine consumer intention towards halal packaged food products produced by the non-Muslim manufacturer. The findings of this study show that religiosity, exposure, and halal logo are the potential sources of Muslim decision making
Riquelme, Mahdi Sayed Abbas, and Rios (2012)	Muslim /Halal	Kuwait	TRA	The purpose of this research is to understand consumer's intention to purchase counterfeit products in a Muslim country based on TRA. The results reveal that value consciousness, norms, performance risk and ethical consciousness are the considerable factors in counterfeit purchasing decision making in a Muslim country.
Md Husin and Ab Rahman (2016)	Muslim /Halal	Malaysia	TPB	The aim of this research is to apply the theory of planned behavior as an underpinning theory to determine consumer intention towards takaful (Islamic insurance). The findings indicate that awareness, knowledge, and exposure are the factors that determine Muslim intention regarding Islamic insurance.
Haque et al. (2015)	Muslim /Halal	Malaysia	TPB	The purpose of this study is to explore the factors that affect non-Muslim consumer's intention towards halal buying. This study applied theory of planned behavior as an underpinning theory and found that attitude, subjective norm, and perceived behavior

				control have significant effect on non-Muslim consumer intentions
Md Husin and Ab Rahman (2013)	Muslim /Halal	Malaysia	DTPB	This study aims to review the antecedents of consumer intention to participate in family takaful plan (insurance plan) by using decomposed theory of planned behavior as an underpinning theory. Furthermore, researchers suggested that demographic factors also play a vital role to participate Islamic insurance plans.
Mukhtar and Mohsin Butt (2012)	Muslim /Halal	Pakistan	TRA	The purpose of this study is to examine the Muslim attitude, subjective norm and religiosity towards halal products by using the theory of reasoned action as an underpinning theory. The findings reveal that religiosity plays an important role in Muslim consumption behavior.
Abdur Razzaque and Nosheen Chaudhry (2013)	Muslim /Halal	Australia	TPB	The purpose of this study is to investigate the impact of religiosity on Muslim consumers who are living in a non-Muslim country. Furthermore, this study also investigates the effect of product information on decision-making process by using TPB as an underpinning theory.
Hasnah Hassan (2014)	Muslim /Halal	Malaysia	TRA	The aim of this study is to determine the effect of religious green values and green purchase intention among middle-class Malaysian Muslims. Results showed that religious green values lead towards green purchase intention.
Md Husin, Ab Rahman, and Tyler (2016)	Muslim /Halal	Malaysia	DTPB	To examine factors that affect Muslims intentions to participate Islamic insurance plans. The findings indicate that DTPB is an effective model to predict individual intention to participate Islamic insurance plan.

Mohd Suki and Abang Salleh (2016)	Muslim /Halal	Malaysia	TPB	The aim of this study is to investigate the effect of attitude, subjective norm, perceived behavioral control and halal image on consumer's intention to patronize halal stores in Malaysia. The findings indicate that consumers intentions to patronize halal stores are influenced by attitude, subjective norm, perceived behavioral control and halal image.
Abd Rahman et al. (2015)	Muslim /Halal	Malaysia	TRA	This study examines the effect of knowledge and religiosity on attitude towards halal cosmetic buying intention. Furthermore, this study also examines the existence of a difference between attitude towards halal food and halal cosmetics. The findings confirmed the effectiveness of TRA to predict Muslim buying intentions.
Lujja, Mohammad, Hassan, and Hassan (2016)	Muslim /Halal	Uganda	TRA	The aim of this study is to understand the factors that affect public intention to adopt Islamic banking in Uganda base on TRA. The key findings of this study reveal that attitude effect more on Islamic banking intention as compare to the subjective norm.
Al-Maghrabi and Dennis (2011)	Muslim /Halal	Saudi Arabia	TAM, ECT	This study incorporates technology acceptance model (TAM) and expectation confirmation theory (ECT) to examine e-shopping intention among Saudi consumers. The results showed that perceived usefulness, social pressure and enjoyment are the determinants of e-shopping intention in Saudi Arabia.
Yuri Mohd Suki and Mohd Suki (2015)	Muslim /Halal	Malaysia	TPB	The aim of this paper is to investigate whether Muslim and non-Muslim consumers give difference importance towards green consumption. Empirical results of this study indicate that religiosity effect on Muslim intention as compare to non-Muslims where environmental consciousness effect green consumption behavior.

U. Ahmed, Muslim China TPB	Sam Al-Kwafi, Saiti, Bin Othman (2014)	/Halal			The purpose of this study is to examine the determinants of halal meat consumption among Chinese minorities (Muslim), based on TPB. The findings indicate that attitude and subjective norm have a positive effect on behavioral intention but perceived behavioral control have a negative effect on behavioral intention.
Shah Alam and Mohamed Sayuti (2011)	Muslim Malaysia	/Halal		TPB	The purpose of this research is to investigate halal food purchasing behavior among Malaysian Muslim consumers by employed TPB. The empirical findings indicate that attitude, subjective norm and perceived behavioral control have a positive effect on halal food purchasing intention.
Thye Mohd and (2014)	Goh, Suki, Fam Muslim Malaysia	/Halal		TCV	The aim of this study is to investigate consumption values (functional, social, emotional, conditional and epistemic) model for Islamic mobile banking acceptance. The findings confirm the effectiveness of theory of consumption values in an Islamic context.
Amin (2013)	Muslim Malaysia	/Halal		TRA	The purpose of this research is to explore the factors that affect Malaysian Muslim consumer's intention to use Islamic financial credit cards. The findings reveal that attitude, SN and perceived financial cost significantly affect Muslim consumer intentions to use Islamic financial card.
Sun, Fam, Xue, and Xue (2012)	Goh, Muslim Southeast Asian countries	/Halal		TAM	The aim of this research is to examine the effect of religion (affiliation, commitment) on young student intentions to adopt Islamic mobile phone banking. The findings indicate that subjective norms significantly effect on devout Muslims. Furthermore, utilitarian attributes effect on casual and non-Muslims intentions to adopt Islamic phone banking services.

Amin, Rahim Abdul Rahman, Laison Sondoh Jr, and Magdalene Chooi Hwa (2011)	Muslim /Halal	Malaysia	TRA	This study wants to examine the determinants of Muslim consumer's intention to use Islamic personal financing. The empirical results found that attitude, pricing, and social influence are the significant determinants that influence on the use of Islamic personal financing. Furthermore, religiosity and government support do not influence on intention to use Islamic personal financing.
Bonne, Vermeir, Bergeaud-Blackler, and Verbeke (2007)	Muslim /Halal	France	TPB	The purpose of this study is to examine the determinants of halal meat consumption among French Muslims by using TPB. The results indicate that attitude, subjective norm and perceived behavioral control predict halal meat consumption effectively.
Lada, Harvey Tanakinjal, and Amin (2009)	Muslim /Halal	Malaysia	TRA	The aim of this research is to determine factors that effect on Malaysia Muslim consumer's intention to purchase halal products. the results indicate that attitude and subjective norm significantly effect on Muslim intention to purchase halal products. Furthermore, this study confirms the utilization of TRA in an Islamic context.
Kalantari Shahijan, Rezaei, Nigel Preece, and Khairuzzaman Wan Ismail (2014)	Muslim /Halal	Malaysia	TRA	The purpose of this research is to examine the relationship between attitude, subjective norm, behavior intention, actual behavior and retail performance of halal beef retailers. The empirical results support the utilization of theory of reason action (TRA) in an Islamic context.
Amin, Rahim Abdul Rahman, and Ramayah (2009)	Muslim /Halal	Malaysia	TRA	The purpose of this research is to examine the acceptance level of Islamic accounting course among university students by using TRA. The results showed that amount of information, attitude and subjective norm are significantly effected on the

					behavioral intention of students to enroll in Islamic accounting course.
Setyobudi et al. (2016)	Muslim /Halal	Indonesia	MGB		The aim of this research is to investigate the Islamic bank saving behavior among Muslims by using the model of goal-directed behavior (MGB). The results showed that MGB has good indicators of fit.
Amin (2012)	Muslim /Halal	Malaysia	TRA		The purpose of this paper is to examine the factors that affect Muslim consumer intention to use Islamic credit card. The findings reveal that material status, education level, religion, age, knowledge and financial recommendation significantly affects the Islamic card usage intention
Md Husin, Ismail, et al. (2016)	Muslim /Halal	Malaysia	DTPB		The aim of this study is to examine the effect of word of mouth and mass media on the subjective norm and the intention to purchase Islamic insurance policy. The empirical results found that word of mouth and mass media significantly effect on subjective norm that leads towards intention to purchase Islamic banking products (Islamic insurance)
Jamshidi, Jamshidi, Hussin, and Hussin (2016)	Muslim /Halal	Malaysia	TAM		The purpose of this study is to address the factors that affect Muslim consumer's intention to use Islamic credit card. The findings of this study confirm the applicability or soundness of TAM in Islamic context
Sadeghi and Heidarzadeh Hanzaee (2010)	Muslim /Halal	Iran	TAM TRA TPB		The aim of this study is to seek the factors that affect customer satisfaction level. The findings reveal that accuracy, usefulness, accessibility, website design, security, bank image, and convenience are the factors that affect customer satisfaction
Bachleda, Hamelin, and Benachour (2014)	Muslim /Halal	Morocco	TPB		The aim of this paper is to examine the impact of religiosity on Muslim women clothing choice. The results reveal that religiosity plays an important role in Muslim women clothing choice.

Charsetad and Charsetad (2016)	Muslim /Halal	Iran	TPB	This study wants to examine the blood donation behavior among young adults by using TPB. The results reveal that attitude, subjective norm, and perceived behavior control affect blood donation behavior.
Boulila Taktak, Echchabi, Ayinde Olorogun, and Azouzi (2014)	Muslim /Halal	Tunisia	TID	The aim of this study is to investigate the factors that affect Tunisian customer's intention to use Islamic banking products (Takaful). The findings reveal the soundness of theory of innovation diffusion (TID) in an Islamic context.

2.6.5.3 Discussion and results

Based on extensive literature review, two theories such as the theory of reasoned action (TRA) and the theory of planned behavior (TPB) seem to have a prominent role in explaining consumer context specific behavior. The research framework of TRA and TPB makes it impossible for researchers to understand or deeply explore context specific determinants of behavior (Christopher J. Armitage, 2015; Norman, Conner, & Stride, 2012; Sniehotta, Pesseau, & Araújo-Soares, 2014; Westaby, 2005a). Pure (TRA/TPB) model diminish explanatory power when we deal with context-specific behavior (Conner & Norman, 2005). Hence, to overcome this limitation, the future researcher should consider any other behavioral theory to understand context-specific behavior. The region where the research was conducted to collect empirical evidence is another important factor. This highlights the key regions where researchers have shown interest in pursuing an empirical research. The research was conducted in 11 countries/regions. The importance of the country and saturation of research in a region may be estimated based on this data. The results highlight that majority of prior studies concerning consumption related variables

towards halal consumption have been done in Malaysian context which is racially heterogeneous i.e. the population comprises different races like Malays, Chinese, Indians, and other minority groups. Authors that employ center of attention Malaysia as an area of study note down that their results cannot be generalized to the broader community and the next phase of our research demand empirical work is to be done in other Islamic countries, e.g. Pakistan, Indonesia, Bangladesh etc.

2.6.6 Rationale for choosing BRT

The empirical studies on cosmetic consumption related variables in general and halal cosmetics consumption related variables in particular use theory of planned behavior (TPB) or theory of reasoned action (TRA) (Abd Rahman et al., 2015; Ahlam Nuwairah Ahmad et al., 2015; N. U. Ansari & Mohammed, 2015; A. Aziz et al., 2013; A. J. C. M. Hashim & Musa, 2013, 2016; J. C. M. Hashim & Rosidah Musa, 2014; H. Y. Kim, 2009; Kyung, 2012; Tajeddini & Nikdavoodi, 2014; Yeon Kim & Chung, 2011). Behavioral researcher (Christopher J. Armitage, 2015; Norman et al., 2012; Sniehotta et al., 2014; Westaby, 2005a; Westaby et al., 1997; Westaby et al., 2010) indicate that research framework of TPB and TRA makes it impossible to investigate or deeply explore the context-specific factors of behavior. With this in mind, (Westaby, 2005a) proposed BRT to overcome limitations of TRA/TPB. Westaby (2005a) believed that BRT has more helpful for behavioral researchers who want study context specific factors of behavior, moreover, BRT has better explanatory power than the pure TPB and TRA. To date, BRT theory application are very few (Norman et al., 2012) and to researcher knowledge, BRT is not applied in the

halal domain as well as in cosmetic industry (e.g. A. J. C. M. Hashim & Musa, 2013; Souiden & Rani, 2015). Hence this study applied BRT as an underpinning theory.

2.7 Halal Cosmetic Purchase Intention

Behavioral intention is an essential factor in understanding behavioral willingness before a specific behavior is adopted. Behavioral intention indicates the expression induced during the actual behavioral process; this expression points out whether a particular behavior will be adopted or not. Ajzen (1991) stated that intention is the main predictor and regarded as the immediate antecedent of individual behavior. Behavioral intention is a requisite process in any type of actual behavior; it is a decision made previous to the adoption of behavioral intention (Fishbein & Ajzen, 1975). Christopher J Armitage and Conner (2001) mention that with the influence of positive attitude and perceive opportunities; a behavioral intention is likely will be performed. Ajzen (1991) defined behavior intention as

“The motivational factors that influence an individual's readiness to act and to demonstrate the effort they would strive to perform the behavior”.

Purchase intention is “subjective judgment for future behavior”. It refers to the possibility for consumers to be “willing” to consider buying. Purchase intention is a kind of decision making that considers the motivation to purchase a specific brand by the customer (Shah et al., 2012). Previous literature indicates that actual buying behavior is mainly effected by purchase intention. In this context purchase intention is vital concept to discuss in behavior studies (Chang, Chou, Yeh, & Tseng, 2016; Lada et al., 2009; H.-F. Lin, 2007; Mukhtar &

Mohsin Butt, 2012; Pomsanam, Napompech, & Suwanmaneepong, 2014; Sadaf, Newby, & Ertmer, 2012). Researcher defined halal cosmetic purchase intention in the context of this study as

“The willingness of a customer to buy a certain product (halal cosmetic) is known as purchase intention”.

The researcher conducted this study in Pakistan, who is the 2nd largest Muslim country where the majority of respondents are Muslims. For Muslims respondents, there is no need to investigate actual behavior because it is strongly supported by the central figure of Islam Holly Prophet Muhammad (peace be upon him)’s hadith as narrated by Omar bin Al-Khattab (R.A), who said he heard the messenger of Allah (peace be upon him) said *“Actions are but by intention and every man shall have but that which he intended....”* (Nawawi, 1996).

2.8 Antecedents of Halal Cosmetics Purchase Intention

The problem in the present study is that antecedents of behavioral intention in general and halal cosmetics, in particular, have been produced in diver’s ways and they have very inconsistent results. The next paragraphs explain this problem, through discussion of past studies. Halal cosmetic purchase intention has four antecedents which are attitude, subjective norm, perceived behavioral control, and religiosity.

2.8.1 Attitude

According to the theory of reasoned action, human intentions firstly originate from attitude. Positive or negative feelings projecting to specific behavior govern by a positive and negative attitude. Therefore, attitude is favorable or unfavorable depends on its projection (Ajzen & Fishbein, 1980). Ajzen (1991), define attitude in following words: “*the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question*”.

Attitude is constructed from certain beliefs, therefore these salient beliefs are the antecedent of attitude (Ajzen, 1991). Individual behavior that comes from attitude is a function of personal beliefs. According to Ajzen (1991) beliefs means “the perceived consequences of the behavior and a person’s favorable attitude toward a specific behavior strengthens his/her desire to do the behavior”. Positive or negative associations towards an object to determine the favorableness or unfavorableness of attitude towards that object (Ajzen & Fishbein, 2000). Direct observations are a source of belief attainment, beliefs are also obtained indirectly by getting information from different sources or through inferences (Doll & Ajzen, 1992). Long lasting beliefs persist, whereas other is forgotten. Customers attitude influences their intentions and behaviors strongly (Richard P. Bagozzi & Dabholkar, 2000). Behavior governs attitudes that come from salient behavioral beliefs (Ajzen, 1991). Hence, prediction of positive or negative behavior depends on the attitude that comes from one’s salient beliefs. Therefore when a consumer has positive or negative belief towards his/her behavior, his/her attitude will be accordingly positive or negative towards that behavior (Ajzen & Fishbein, 2000).

Several previous studies showed that attitude as one of the most important antecedents of halal cosmetics purchase intentions. Abd Rahman et al. (2015) conducted a study in Malaysia. Empirical data were obtained from 110 Malaysian Muslim respondents by using convenience sampling technique. The findings revealed that attitude determined intention to buy halal cosmetic products. In addition, A. Aziz et al. (2013) conducted an investigation on university students to understand what factors will have an impact on students intentions to buy halal cosmetics products. The findings of this study showed that attitude significantly effects on behavioral intention to buy halal cosmetic products. Moreover, J. C. M. Hashim and Rosidah Musa (2014) indicate that Malaysian Muslim female attitude plays a significant role towards halal cosmetic buying intention.

Kaur and Osman (2014) conducted a study in Malaysia to investigate halal cosmetic buying behavior factors. The data of this study was collected from 440 working women's by employed non-probability sampling technique. The result shows that attitudinal factor plays an important role in influencing intention to buy halal cosmetic products. In a similar vein, to identify the factors that encourage Muslim consumers to buy halal cosmetic and personal care products (N. U. Ansari & Mohammed, 2015) conducted a study in Pakistan. Empirical data were gathered from two cities (Karachi and Islamabad) of Pakistan through a field survey. The results indicate that attitude positively influence intention towards buying halal cosmetic and personal care products.

Yeon Kim and Chung (2011) conducted a study in the USA to investigate consumer purchase intention for organic cosmetics products. Data were gathered from 207 consumers

by using online questionnaire. Multiple regression analysis was used to test research hypothesis. The results of this study show that attitude significantly and positively influences on behavioral intentions to buy organic personal care products. In concurrence with (Yeon Kim & Chung, 2011), Nguyen (2014) asserted the relationship between attitude and behavioral intention towards organic cosmetic products is significant. In addition, Bachleda et al. (2012) confirmed the association between attitude and behavioral intention of young Moroccan adults towards sunscreen products is significant.

Numerous marketing researchers such as (Cheh, 2014; Ferraz, 2011; Holst & Iversen, 2011; Kyung, 2012; Nikdavoodi, 2012; Saleem & Recker, 2014; J. Strauss & Kleine Stüve, 2016; Sukato & Elsey, 2009; Tajeddini & Nikdavoodi, 2014) found the significant association between attitude and behavioral intention. But Lam and Hsu (2006) contradict with the findings of (Abd Rahman et al., 2015; N. U. Ansari & Mohammed, 2015; A. Aziz et al., 2013; Bachleda et al., 2012; Cheh, 2014; Ferraz, 2011; J. C. M. Hashim & Rosidah Musa, 2014; Holst & Iversen, 2011; Kaur & Osman, 2014; Kyung, 2012; Nguyen, 2014; Nikdavoodi, 2012; Saleem & Recker, 2014; J. Strauss & Kleine Stüve, 2016; Sukato & Elsey, 2009; Tajeddini & Nikdavoodi, 2014; Yeon Kim & Chung, 2011), and found that the relationship between attitude and behavioral intention is insignificant.

All in all, from the literature reviewed so far, it can be seen that the relationship between attitude and behavioral intention is inconsistent; many consumer behavior researchers indicate that the relationship between attitude and behavioral intention is significant, and others have shown the insignificant relationship. Moreover, previous studies have

methodological and geographical gaps (i.e. Abd Rahman et al., 2015; N. U. Ansari & Mohammed, 2015; A. Aziz et al., 2013; Bachleda et al., 2012; Cheh, 2014; Ferraz, 2011; J. C. M. Hashim & Rosidah Musa, 2014; Holst & Iversen, 2011; Kaur & Osman, 2014; Kyung, 2012; Nguyen, 2014; Nikdavoodi, 2012; Saleem & Recker, 2014; J. Strauss & Kleine Stüve, 2016; Sukato & Elsey, 2009; Tajeddini & Nikdavoodi, 2014; Yeon Kim & Chung, 2011). So their results cannot be generalized to the broader community. The following Table 2.4 shows that the past researchers investigate the relationship between attitude and behavioral intentions.

Table 2.4

Summary of past research examining the relationship between attitude and behavioral intention

Author	Country	Dependent variable	Results
Abd Rahman et al. (2015)	Malaysia	Behavioral intention	Significant
A. Aziz et al. (2013)	Malaysia	Behavioral Intention	Significant
J. C. M. Hashim and Rosidah Musa (2014)	Malaysia	Behavioral Intention	Significant
N. U. Ansari and Mohammed (2015)	Pakistan	Behavioral Intention	Significant
Yeon Kim and Chung (2011)	USA	Behavioral Intention	Significant
Kyung (2012)	Japan	Behavioral Intention	Significant
Nikdavoodi (2012)	Sweden	Behavioral Intention	Significant
Tajeddini and Nikdavoodi (2014)	Sweden	Behavioral Intention	Significant
Lam and Hsu (2006)	Hong Kong	Behavioral Intention	Insignificant
Bachleda et al. (2012)	Morocco	Behavioral Intention	Significant

Nguyen (2014)	Vietnam	Behavioral intention	Significant
Sukato and Elsey (2009)	Thailand	Behavioral intention	Significant
Cheh (2014)	Malaysia	Behavioral intention	Significant
Kaur and Osman (2014)	Malaysia	Behavioral intention	Significant
J. Strauss and Kleine Stüve (2016)	Germany	Behavioral intention	Significant
Holst and Iversen (2011)	Denmark and Germany	Behavioral intention	Significant
Ferraz (2011)	Portugal	Behavioral intention	Significant

2.8.2 Antecedents of Attitude

The effect of knowledge, health consciousness and environmental consciousness on attitude has been theorized and validated by numerous studies (Abou-Youssef, Kortam, Abou-Aish, & El-Bassiouny, 2015; R. Kaynak & Ekşi, 2014; Pino, Peluso, & Guido, 2012; Putit & Johan, 2015; Royne, Fox, Deitz, & Gibson, 2014; Souiden & Rani, 2015; Yadav & Pathak, 2016a; Zaimy Johana Johan, 2014). However, a less-studied research area is how knowledge, health consciousness and environmental consciousness effect on attitude towards cosmetics products in general and halal cosmetics products in particular (i.e. N. U. Ansari & Mohammed, 2015; A. Aziz et al., 2013; A. J. C. M. Hashim & Musa, 2013; Nguyen, 2014; Tajeddini & Nikdavoodi, 2014). Therefore, this study investigates the factors those affect one's intentions towards purchasing of halal cosmetics because these variables cannot be research adequately in the cosmetic domain. Researcher discusses the impact of three antecedent's components that effect customer's attitude towards purchase intentions of halal cosmetics products. The researcher expected that knowledge, health

consciousness, and environmental consciousness have a significant effect on attitude and measure attitudinal beliefs on the base of previous scholarly studies.

2.8.2.1 Knowledge

Abd Rahman et al. (2015) define knowledge as “the facts, feelings or experiences are known by a person or a group of people; it can also be defined as awareness, consciousness or familiarity gained by experience or learning”. More precisely, knowledge means “the expertise and skills acquired by a person or a group of people through a theoretical or practical understanding of a subject” (Radzi, Zahari, Muhammad, Aziz, & Ahmad, 2011; Sinclair, 2015). Consumer decision making based on product knowledge. Product knowledge has an influential impact on the consumer to gain access to the products (Rao & Monroe, 1988). There are two constructs of knowledge first is objective knowledge and the second one is subjective knowledge. Objective knowledge means “accurate information about the product which is stored in consumer’s long-term memory”, the second one is subjective knowledge which means “people’s perceptions of what or how much they know about a product based on their subjective interpretation” (Said, Hassan, Musa, & Rahman, 2014). Objective and subjective knowledge have not a high degree of interdependence (Park, Mothersbaugh, & Feick, 1994), that’s why a consumer can't able to judge their knowledge level (Alba & Hutchinson, 1987).

Consumer behavior mainly influenced by consumer knowledge that affects information searching (Brucks, 1985; Rao & Sieben, 1992) and information processing (Alba & Hutchinson, 1987; Bettman & Park, 1980; Nunnally & Bernstein, 1994; Rao & Monroe,

1988). Acquiring and recalling different information from different patterns of memory make consumer's choice. Storage memory is the main antecedent of the decision-making process (Lynch Jr, Marmorstein, & Weigold, 1988).

The relationship between knowledge and attitude has been extensively studied by past researchers (i.e. Abd Rahman et al., 2015; Barber, Taylor, & Strick, 2009; Putit & Johan, 2015; Yap, Noor, Marshall, & Liew, 2014). Behavioral researchers have reported that better awareness and additional knowledge about halal products have significantly effect on the level of consumption. If consumers have greater awareness and additional knowledge concerning halal products then they have a high level of consumption and vice versa. (N. L. Ahmad, 2011; Yusoff, 2011).

Several Studies have been conducted in relation to knowledge and attitude. Among the studies which reported a positive relationship includes: Aertsens, Mondelaers, Verbeke, Buysse, and Van Huylenbroeck (2011) conducted a research on the association between knowledge and attitude in Belgium. Cross-sectional data were collected through a survey of 529 organic food users by using convenience sampling technique. Multiple regression analysis models are applied to a sample of 529 completed questionnaires. The findings show that high level of knowledge about organic food is positively and significantly affect attitude towards organic food.

To investigate the effect of general and carbon-related environmental knowledge on attitude towards the environment, Polonsky, Vocino, Grau, Garma, and Ferdous (2012)

conducted a study in the USA and reported a significant association between general and carbon specific knowledge and attitude towards the environment. Data were collected from a cross-sectional survey of 352 US consumers. Structural equation modeling was employed to test the hypothesized relationships. Findings reveal that the association between general and carbon-related environmental knowledge on attitude towards the environment is positive and significant.

Moreover, Putit and Johan (2015) examined the relationship between knowledge and attitude towards the acceptance of Halal credit card services in Malaysia. Data were collected from 220 consumers through self-administered questionnaire by using non-probability sampling technique. Findings reveal that knowledge significantly affects consumers attitude toward using halal credit card services.

On the contrary, Abd Rahman et al. (2015) refute knowledge as an antecedent that explains the attitude of Muslim consumers towards nonfood halal products such as cosmetic or personal care products. In a similar way, Yap et al. (2014) conducted a study to investigate antecedents of preventive health behavior among young Malaysian consumer. A survey obtained 438 respondents. The findings from the structural equational modeling showed that high level of health knowledge will not significantly contribute to forming the attitude toward dietary supplement consumption.

From the literature reviewed so far, it can be seen that empirical evidence on the relationship between knowledge and attitude appeared to be mixed. This inconsistency in

scholarly literature concerning this relationship calls for more research to examine this relationship better. Furthermore, Shaari and Mohd Arifin (2010) demonstrated that Muslim consumer knowledge toward halal product and halal logo is vital to make a purchase decision. However, scholarly literature regarding the influence of knowledge on attitudes towards halal cosmetic consumption remains sparse (Ahlam Nuwairah Ahmad et al., 2015). This study, therefore, contributes in this regard. The next Table 2.5 shows the summary of previous studies analyzing the connection between knowledge and attitude.

Table 2.5

Summary of past research examining the relationship between knowledge and attitude towards intention

Author	Country	Dependent variable	Results
Aertsens et al. (2011)	Belgium	Attitude	Significant
Polonsky et al. (2012)	America	Attitude	Significant
Putit and Johan (2015)	Malaysia	Attitude	Significant
Abd Rahman et al. (2015)	Malaysia	Attitude	Insignificant
Yap et al. (2014)	Malaysia	Attitude	Insignificant

2.8.2.2 Health Consciousness

Health consciousness means the degree with which someone tends to care about their health (Leong & Paim, 2015). In other words, health consciousness means a one's willingness to give efforts to maintain his/her health. Individuals, those are conscious about their health are informed and aware about health. Health conscious individuals are

concerned about their health that's why they improve their quality of life by involving in healthy behaviors (Kraft & Goodell, 1993; Newsom, McFarland, Kaplan, Huguet, & Zani, 2005). These type of consumers always prefer healthier food and other products (Cherrier, 2009; Jayanti & Burns, 1998). Furthermore, consumption of products or brands those did not fulfill the requirements of safety and health are considered to be immoral (M. S. Lee, Motion, & Conroy, 2009).

All conventional cosmetic products such as personal care products (i.e. shampoos, shower gels, shaving creams and soaps), leave on products (i.e. skin lightening creams, sunscreens, and moisturizers), fragrance products (i.e. deodorants, aftershaves and perfumes), make-ups products (i.e. lipsticks, eye shadows and foundations), hair care products (i.e. styling agents, colorants, sprays and gels), and nail care products (i.e. paint removers and nail varnishes) causes a number of allergic reactions (V. Smith & Wilkinson, 2016). Wiechers and Musee (2010) indicated that harmful cosmetic ingredients penetrate human skin, which causes skin damages. Different chemicals such as lead, parabens, nano-particle and triclosan are used in antibacterial soaps, deodorants, toothpaste, sunscreens, foundation, nails colors, lipsticks and lotions can affect body's hormone systems and nervous system and leads to infertility in men and women in addition to other serious diseases such as breast cancer (Kamaruzaman, 2008).

Health conscious consumers always adopt health friendly cosmetics those are safe for skin and body; that's why, they are keen about product manufacturing material and ingredients whenever they use cosmetics against to unconscious consumers (Johri & Sahasakmontri,

1998). The core concern of halal cosmetics cares about safe, healthy and high quality from start of manufacturing to consumption of cosmetics (P. Hashim & Mat Hashim, 2013). As halal certified products guarantee the hygiene and cleanliness, the concept is parallel to fulfill the need of consumers which are the raising concern over health (Mathew, 2014).

Several past consumer behavior researchers (R. Kaynak & Ekşi, 2014; Michaelidou & Hassan, 2008; Yadav & Pathak, 2016a) found that health consciousness has a significant influence on intention through attitude; hence increasing health consciousness will be likely to influence intention. The following paragraphs review the previous studies that examine the relationship between health consciousness and attitude. For instance, Yadav and Pathak (2016a) have applied TPB to determine antecedents of organic food behavior among young Indians. Data were collected using cross-sectional survey from 220 young consumers by adopting convenience sampling technique. Structural equation modeling was used to evaluate the hypothesized relationships. The findings showed that relationship between health consciousness and attitude toward organic food intention is significant and positive. In a similar way, to examine antecedents of organic food behavior, Michaelidou and Hassan (2008) reached a conclusion that health consciousness has a significant effect on consumer attitude towards organic food behavior.

Furthermore, R. Kaynak and Ekşi (2014) asserted that the association between health consciousness and anti-consumption attitude is significant and positive. Along the same vein, in Germany, J. Strauss and Kleine Stüve (2016) conducted a study on 384 German consumers to assess antecedents of consumer purchase intention towards organic hair care

products. Their results showed that the relationship between health consciousness and attitude towards organic hair care products is significant. In concurrence to (J. Strauss & Kleine Stüve, 2016), Saleem and Recker (2014) confirmed the relationship between health consciousness and attitude toward organic personal care products among German female consumers.

In contrast (Yeon Kim & Chung, 2011) refute the findings of (Saleem & Recker, 2014; J. Strauss & Kleine Stüve, 2016) that health consciousness has an positive effect on consumer attitude towards cosmetic products. They found that health consciousness has an insignificant effect on consumer attitude towards cosmetic products. Noteworthy, many of the previous studies have underscored the significance of health consciousness on attitude toward cosmetic products, albeit with contrasting results (Yeon Kim & Chung, 2011).

This inconsistency in the literature regarding this relationship urge researcher for more research that can explain this relationship better. Furthermore, the relationship of health consciousness and attitude extensively discuss in the non-halal domain. However, this relationship has predominantly ignored by the past consumer behavior researcher in the halal domain in general and halal cosmetic domain in particular (e.g R. Kaynak & Ekşi, 2014; Michaelidou & Hassan, 2008; Tsai, Cheng, Hung, He, & Wang, 2015). The next Table 2.6 shows that summary of previous researchers analyzing the connection between health consciousness and attitude.

Table 2.6

Summary of past research examining the relationship between health consciousness and attitude

Author	Country	Dependent variable	Results
Michaelidou and Hassan (2008)	Scotland	Attitude	Significant
R. Kaynak and Ekşi (2014)		Attitude	Significant
Yadav and Pathak (2016a)	India	Attitude	Significant
J. Strauss and Kleine Stüve (2016)	Germany	Attitude	Significant
Yeon Kim and Chung (2011)	USA	Attitude	Insignificant
Saleem and Recker (2014)	Germany	Attitude	Significant

2.8.2.3 Environmental Consciousness

According to Alsmadi (2007), environmental consciousness means “showing a strong sense of environmental responsibility (i.e., supporting efforts to protect and preserve the environment as well as advising others to behave accordingly)”. Schlegelmilch, Bohlen, and Diamantopoulos (1996) define environmental consciousness in following words “a motive raising individuals’ awareness of the negative environmental outcomes associated with humankind careless behaviors as well as companies, products or brands and reshaping their attitudes and behaviors in order to decrease hazards of these agents’ operations upon nature”.

Consumers those are conscious about the environment are more convergent to support anti-consumption by caring for nature since they believe that their avoidance of consumption might provide benefit for the society and the world (Cherrier, 2009; Vermeir & Verbeke, 2008). Moreover, most boycotts transforming anti-consumption tendencies to activism are reinforced through customers who have societal and environmental consciousness (Diermeier & Van Mieghem, 2008). Society and environmental conservation behaviors are initiated by environmentally conscious consumers (Bamberg, 2003; Fransson & Gärling, 1999). Environmental care is one of the main motivational factors towards purchasing any product (Basha, 2014).

Wiechers and Musee (2010) claimed that cosmetics products damage the aquatic environment and terrestrial environment. Used cosmetics products are dangerous to the environment. Water systems, lakes and rivers are contaminated with recycled chemicals. Water is a vital component of life. The rain that forms from this contaminated water becomes full of these chemicals. Pollutants of recycled or used cosmetics are spreading everywhere in all water systems as well as in air in which we breathe. Agricultural products and livestock are also suffering due to these widespread movements of pollutants of cosmetics. Thus, these rising concern over the environmental hazards substantially affected the cosmetic industry (Kamaruzaman, 2008; Mohezar et al., 2016).

Corruption in term of damage the environment and natural resources is not permissible in Islam, that's why its human responsibility to maintain its natural composition because human beings are "Khalifahs" or Caliphs on the earth according to Islam (Hasnah Hassan, 2014). One fundamental component of Islamic teaching is to take care of the environment.

According to Quran, it's Allah's blessing on a human that Allah granted us with beautiful ecosystem for life. Islamic teaching has much focus on the care and prevention of environment. For instance, following verses of Quran stress the importance of caring the environment.

“And seek the abode of the Hereafter by means of what Allah has given thee, and neglect not thy portion of the world, and do good (to others) as Allah has done good to thee, and seek not to make mischief in the land. Surely Allah loves not the mischief-makers”.

(Quran, 28: 77).

“And the servants of the Most Merciful are those who walk upon the earth easily, and when the ignorant address them (harshly), they say (words of) peace” (Quran, 25: 63).

“Then we appointed you viceroys in the Earth after them that we might see how ye behave” (Quran 10:14).

“And when he goes away, he strives throughout the land to cause corruption therein and destroy crops and animals. And Allah does not like corruption” (Quran 2:205).

Who perfected everything which He created and began the creation of man from clay.

(Quran32:7).

“And we are commanded to keep it that way: Do no mischief on the Earth, after it hath been set in order. Indeed, the mercy of Allah is near to the doers of good.” (Quran, 7:56).

“Verily, all things have we created in proportion and measure (perfection)”.

(Quran,5:49).

Environmental protection is an ethical and moral matter (Moisander, 2007). Nowadays consumer is becoming more conscious regarding environment-related issues (Hsu, Chang, & Yansritakul, 2017; Khare, 2015; Yadav & Pathak, 2016b). In the past, numerous academicians and researchers have tackled the importance of environmental concern in the marketing literature. For example, J. Strauss and Kleine Stüve (2016) conducted a study in Germany to investigate intention to buy organic hair care products. In total 306 questionnaires were collected for data analysis. The findings of this study show that consumer’s intention to buy organic hair care products is significantly influenced by attitude and attitude can be predicted by environmental consciousness.

In another research by Saleem and Recker (2014), the TPB was employed to study what influences consumer intentions to buy organic personal products. They collect data from German female consumers by employing convenience sampling technique. The results of this study asserted that the relationship between environmental consciousness and attitude to buy organic personal care products is significant and positive.

In a similar vein, Yeon Kim and Chung (2011) conducted a study in the USA to investigate consumer purchase intention for organic cosmetics products. Data were gathered from 207 consumers by using online questionnaire. Multiple regression analysis was used to test research hypothesis. The results of this study show that environmental consciousness

significantly and positively influences on attitude towards an intention to buy organic personal care products.

In contrast, Wu, Huang, and Teng (2013) study show that environmental consciousness has an insignificant effect on attitude towards behavioral intention. In relation to that, Y. Kim and Han (2010) point out that environmental concern has not influenced on attitude towards behavioral intention. This finding shows that the relationship between attitude and the environmental consciousness is inconclusive.

Due to inconclusive results in literature, this relationship calls for more research to examine this relationship better. In addition, in the past several studies on consumer environment-friendly behavior have gained prominence in the context of developed nations (Yadav & Pathak, 2016b). However, very few studies have focused on consumer environment-friendly behavior in developing countries like the Pakistan, a world second most populous Muslim country. This study, therefore, contributes in this regard. The next Table 2.7 shows the summary of past research examining the relationship between environmental consciousness and attitude.

Table 2.7
Summary of past research examining the relationship between environmental consciousness and attitude

Author	Country	Dependent variable	Results
J. Strauss and Kleine Stüve (2016)	Germany	Attitude	Significant
Saleem and Recker (2014)	Germany	Attitude	Significant

Yeon Kim and Chung (2011)	USA	Attitude	Significant
Wu et al. (2013)	Taiwan	Attitude	Insignificant
Y. Kim and Han (2010)	USA	Attitude	Insignificant

2.8.3 Subjective norm

Fishbein and Ajzen (1975) defined subjective norm as “the person’s perception that most people who are important to him think he should or should not perform the behavior in question”. Subjective norm has been conceptualized as the inner view about key characters in the decision maker’s life, making the decision maker to aspire to perform (or not act) in a certain way (S. Smith & Paladino, 2010). Subjective norm is also considered to be the perceived social pressure that makes a person feel the necessity to perform a specific behavior (Ajzen, 1991). Furthermore, in the TPB, subjective norm denotes solely that individual views significant others as expecting the performance or non-performance of a particular behavior (Ajzen, 1991). By and large, norms denote all the embedded rules guiding individuals in society, and they inform them about what is considered to be right and/or wrong (Webster, 1975). These norms usually center on a decision maker’s preferences of referents and also on the person’s longing to act in a way that is consistent with these referents.

Subjective norm is presumed to contain two components that work in tandem: normative beliefs (i.e., beliefs about how significant others expect an individual to perform) and the

motivation to comply (i.e., positive or negative judgment towards performing in line with a normative belief) (Ajzen, 1991).

In the literature of consumer behavior, there are numerous researchers in the cosmetic domain that have been conducted studies to examine the relationship between subjective norm and purchase intention. For instance, Yeon Kim and Chung (2011) conducted a study in the USA to investigate cosmetic buying behavior of US consumers towards organic cosmetic products. To examine the hypothesized model, the quantitative research design was employed. A total of 202 valid questionnaires were returned. Multiple regression analysis was used to test research hypothesis. The results indicate that subjective norm significantly affects the behavioral intentions of consumers towards organic cosmetics.

Sukato and Elsey (2009) developed a model to examine male cosmetic buying behavior regarding facial care products in Thailand. The model was especially tested with a sample of 422 Thai male consumers aged 21 to 50 years. The result indicated that social norm significantly effects on purchase intention and purchasing behavior in buying facial care products among Thai male consumers. On the same note, a study conducted by Ferraz (2011) in Portugal demonstrated that subjective norm has a significant bearing on consumer purchase intention to buy personal care products.

Tajeddini and Nikdavoodi (2014) conducted a study in Sweden. Data were gathered from 400 women by using convince sampling technique. Structural equation modeling (SEM) was employed on collected data by using the AMOS22 statistical software. The findings of this study found that subjective norm significantly affects the buying intention of

cosmetics products. In line with that, additionally, Bachleda et al. (2012) support the relationship between subjective norm and behavioral intention of young Moroccan adults towards cosmetic products (Sun Screen).

Furthermore, to examine antecedents of halal cosmetic buying behavior, N. U. Ansari and Mohammed (2015) reached a conclusion that subjective norm has a significant effect on consumers buying intentions towards halal cosmetics. Along the same vein, (A. Aziz et al., 2013; Kaur & Osman, 2014) asserted that the relationship between subjective norm and behavioral intention toward halal cosmetics is significant and positive in the Malaysian context.

On the contrary, other investigators found that the association between subjective norm and behavioral intention towards cosmetic and personal care products is insignificant. Such as Nikdavoodi (2012) who conducted a study on a number of Women in Sweden to determine factors that influence consumer intentions towards cosmetics products. He points out that the relationship between subjective norm and cosmetic purchase intention is insignificant. In line with that, additionally, Myers and Horswill (2006) found empirically an insignificant impact of subjective norm on behavioral intentions towards skin care products. In concurrence with Myers and Horswill (2006), it was revealed by Kyung (2012) that individual behavioral intentions towards cosmetics and personal care products are not influenced by their subjective norm.

Saleem and Recker (2014) also highlighted that the relationship between subjective norm and behavioral intention to buy organic personal care products is insignificant among German female consumers. Similarly, Holst and Iversen (2011) conducted a research on the motives driving organic personal care products for German and Danish consumers and the results showed that the association between subjective norm and the behavioral intention is weak and they do not much contribute to the variance in intention to buy organic personal care products.

In previous paragraphs, it can be seen that the subjective norm has been investigated in a diverse way. Moreover, the results were indeed inconsistent, most of the past studies indicate that significant relationship between subjective norm and behavioral intention towards cosmetics products, and other has shown an insignificant relationship. The following Table 2.8 shows that the past research, investigate the relationship between attitude and behavioral intention (cosmetic domain).

Table 2.8

Summary of past research examining the relationship between subjective norm and behavioral intention in cosmetic settings

Author	Country	Dependent variable	Results
Yeon Kim and Chung (2011)	USA	Behavioral intention	Significant
Tajeddini and Nikdavoodi (2014)	Sweden	Behavioral intention	Significant
Holst and Iversen (2011)	Germany/Denmark	Behavioral intention	Insignificant
A. Aziz et al. (2013)	Malaysia	Behavioral intention	Significant
N. U. Ansari and Mohammed (2015)	Pakistan	Behavioral intention	Significant

Saleem and Recker (2014)	Germany	Behavioral intention	Insignificant
Nikdavoodi (2012)	Sweden	Behavioral intention	Insignificant
Sukato and Elsey (2009)	Thailand	Behavioral intention	Significant
Myers and Horswill (2006)	UK	Behavioral intention	Insignificant
Kyung (2012)	Japan	Behavioral intention	Insignificant
Bachleda et al. (2012)	Morocco	Behavioral intention	Significant
Nguyen (2014)	Vietnam	Behavioral intention	Significant
Ferraz (2011)	Portugal	Behavioral intention	Significant

2.8.4 Antecedents of Subjective norm

Researchers in marketing and consumer behavior agree that for better and comprehensive understanding of consumer intentions, we should explore the impact of different communication channels such as family, friends, peers, mass media, word of mouth, and social media on behavioral intention (Md Husin, Ismail, et al., 2016; Mohammad G. Nejad, Tran, & Corner, 2016; Zolait & Sulaiman, 2009). A Large body of previous studies, nevertheless, has shown the effect of different communication channels on the behavioral intentions of consumers towards cosmetic products (i.e. N. U. Ansari & Mohammed, 2015; A. Aziz et al., 2013; Bachleda et al., 2012; A. J. C. M. Hashim & Musa, 2013; Kyung, 2012; Myers & Horswill, 2006; Nguyen, 2014; Nikdavoodi, 2012; Tajeddini & Nikdavoodi, 2014; Yeon Kim & Chung, 2011).

Accordingly, in light of above mentioned, Mohammad G. Nejad et al. (2016) opined that little is known about the impact of different communication channels on context-specific

behavioral intentions of consumers. At this juncture, there is a dire need for the researcher to explore the impact of different communication channels on the behavioral intention of consumers towards halal cosmetic products. For better and accurate understanding of the theoretical mechanism of the research model and enhancing predicting power consumer intentions towards halal cosmetic products, the current study employed reasoning approach on subjective norm that leads subjective norm into two possible reasons such as family influence and mass media influence.

2.8.4.1 Family influence

Family influence an individual's behavior because it is one of the most important in relative groups. Family played a vital part in deciding behavioral intention of Muslims in halal consumption behavior because Muslim lived in a collectivistic (i.e. Islamic) culture where their behavior is interdependent with the family (Bonne et al., 2007; Lada et al., 2009). Islamic customs, traditions, and teachings provide motivation to children to pay obedience to parents, give respect and gratitude (Kamel, 2008). Behavioral scholars reveal that family is a behavioral subjective norm that has an effect on individual behavior (Taylor & Todd, 1995b). In this manner, A. S. Al-Ajam and Md Nor (2015) argued that individual behavior is guided by the expectations of others such as family and family perception play an important role in determining behavioral intention. Family influence is defined as

“The influence or pressure from sources known (family) to perform the behavior” (A. S.

Al-Ajam & Md Nor, 2015)

Several studies have discussed the effect of family influence on subjective norms towards behavioral intention. For instance, Shih and Fang (2004) have discussed the family influence upon the subjective norms in the behavior of a number of bank clients in Taiwan. The results show that family significantly and positively affects the subjective norms. In addition to that Nor and Pearson (2008) conducted a study in Malaysia in banking domain. The researchers confirm that the important role played by the family in the behavior of a number of college students in Malaysia. The study points out that the relationship between the family influence and the subjective norms is influential and positive. In a similar vein, (Ismail & Razak, 2011) also confirmed the association between family influence and subjective norm.

In another related study, A. S. Al-Ajam and Md Nor (2015) confirmed that the association between family influence and subjective norm toward the adoption of internet banking services is significant and positive. In addition, Ng and Rahim (2005) indicate that family plays a significant and positive role as one of the behavioral subjective norms in relation to the usage of internet services by a number of college students through their home computers in Singapore. Furthermore, several researchers confirmed that family influence plays a significant in determining individual behavioral intention. Such as, Lada et al. (2009) conducted a study in Malaysia to predict intentions to choose halal products. The results indicate that family members are strong referent point and the subjective norm is predominately influenced by family members to predict intention to choose a halal product. The researchers suggested that appropriate marketing strategy that focuses on family should be a good approach to attract intention. In another related study, Khalek and Ismail

(2015) have conducted a study to analyze the factors of intention in consuming halal food based 425 Muslim respondents. Results of the study demonstrated subjective norms especially influence from family influence to consume halal food.

To examine students awareness and usage intention towards halal labeled beautification products Teng and Jamaliah (2013) conducted a study in Malaysia. This study discloses that family influence plays an important role in defining Muslim students intentions towards halal labeled beautification products. But Khalek (2014) refute that family perception plays an important part in determining Muslim consumers intention towards halal products and services. In consensus to that, Chu and Wu (2004) confirmed that the relationship between family influence and subjective norm towards behavioral intention is insignificant.

From previous findings, the family is one of the most important referent groups to influence individual behavior. In addition, past researchers showed family influence significantly affect subjective norm. Furthermore, only one study show that the family influences has an insignificant effect on the subjective norm, which could lead to the relationship between family influence and subjective norm having inconclusive results. Pakistan is one of the Islamic countries that emphasize on family influence. However, in the cosmetic domain, there are limited past studies that examine the family influence on individual behavior. For that reason, researcher investigates the relationship between family influence and subjective norms towards purchase intentions in the context of halal cosmetic. The

following Table 2.9 shows that the past research, investigate the relationship between family influence and subjective norm.

Table 2.9

Summary of past studies that examining the relationship between family influence and subjective norm.

Author	Country	Dependent variable	Results
Shih and Fang (2004)	Taiwan	Subjective norm	Significant
Nor and Pearson (2008)	Malaysia	Subjective norm	Significant
A. S. Al-Ajam and Md Nor (2015)	Yemen	Subjective norm	Significant
Ng and Rahim (2005)	Singapore	Subjective norm	Significant
Chu and Wu (2004)	Taiwan	Subjective norm	Insignificant
Ismail and Razak (2011)	Malaysia	Subjective norm	Significant

2.8.4.2 Mass Media

A diversified collection of communication channels is called mass media such as broadcast media, digital media, outdoor media, print media, event organizing and public speaking. The impact of mass media coverage on the marketing atmosphere is immeasurable (Wilkinson & Thelwall, 2012). Mass media play an important role in determining individual behavior (Fathi et al., 2016). The effect of mass media on usage behavior of cosmetic and personal care products is enormous (Massoro, 2016; Teng & Jamaliah, 2013). Mass media influence is defined as

“The influence or pressure from the mass media to perform the behavior”

(A. S. Al-Ajam & Md Nor, 2015).

Ajzen (1985) introduced mass media as one of the antecedents of the subjective norms by using TPB model. The findings of that study indicate that mass media influences clients when it comes to using IT. Besides, the mass media is an important source of information in many broader fields as it covers vast areas and large numeric shares and community gain benefits from it (Agostinelli & Grube, 2002). Moreover, Rogers (1995) recommend that mass media is significant means when it comes to social influences, as the mass media encourages people to consume healthy food. Additionally, Chan (1998) points out that the mass media plays a vital role in influencing the client's behavior in a positive or negative manner.

Mass media is the source of information for Muslim consumers about halal product and services (Fathi et al., 2016). Mass media is composed through diverse sources of information like radio, television, internet, outdoor display, posters, brochures, bulletin, magazines, newspaper, articles, advertisement, documentaries, sales promotion and so on (Ayanwale, Alimi, & Ayanbimipe, 2005; Omar, 2013; S. Rahim & Pawanteh, 2009). In the world of today, the role of media became very influential on consumers (Swidi et al., 2010). Younger consumers update their knowledge and gain more information about halal products through mass media such as such as television, radio, magazines and internet because they are more exposed to the media (Ambali & Bakar, 2014; Rezai, Mohamed, & Shamsudin, 2015; Rezai et al., 2010). Televisions and the internet have inspirations on

consumers. The decision-making process of the consumer was influenced by information that they get through television and the internet because they take favorite TV hero's and stars as a referent (Blomert, 2007).

Media play a significant role to aware consumers about nonfood halal products, for example, cosmetics, pharmaceuticals, toiletries, leather products, fragrances, perfume, and brushes etc. (N. F. Rahim, Shafii, & Shahwan, 2013). For the awareness of nonfood halal products like halal cosmetics, impersonal sources of information such as television, radio, magazine and newspaper are very important (Teng & Jamaliah, 2013). In a similar vein, Massoro (2016) have conducted a study in Tanzania to examine students information seeking and usage behavior on cosmetic and personal care products. Data were collected by employed a cross-sectional survey of 150 students of higher learning institutions. This study discloses that as compare to family, mass media (i.e. the internet, newspaper, magazines, and television) were consider the most favorable source of information seeking before selecting the personal care products.

Furthermore, (Khalek (2014)) has conducted a study in Malaysia to examine the factors that mindset young consumers towards halal food outlets and halal certification. This study is based on Muslim students' respondents between 16 to 35 years old from higher learning private institutions. The researcher points out that the mindset of Muslims consumer towards halal food outlets and halal certification should augment through media.

The effect of mass media on subjective norm has been validated in a number of studies (A. S. Al-Ajam & Md Nor, 2015; Al-Majali & Nik Mat, 2010; H.-F. Lin, 2007; Ng & Rahim, 2005; Renda dos Santos & Okazaki, 2015; Tsai et al., 2015). Although much has been learned regarding the influence of mass media on several IT fields and food, an understanding of whether mass media influences subjective norms towards halal cosmetics remains sparse. Therefore, there is a need to examine mass media precisely in the context of halal cosmetic. The following Table 2.10 shows that the past research, investigate the relationship between mass media and subjective norm.

Table 2.10

Summary of past research that examining the relationship between mass media and subjective norm towards intention

Author	Country	Dependent variable	Results
A. S. Al-Ajam and Md Nor (2015)	Yemen	Subjective norm	Significant
Al-Majali and Nik Mat (2010)	Jordan	Subjective norm	Significant
H.-F. Lin (2007)	Taiwan	Subjective norm	Significant
Tsai et al. (2015)	Taiwan	Subjective norm	Significant
Ng and Rahim (2005)	Singapore	Subjective norm	Significant
Renda dos Santos and Okazaki (2015)	Brazil	Subjective norm	Significant

2.8.5 Perceived behavior control

According to (Ajzen, 1991), perceived behavioral control is referred as: “the perceived ease or difficulty of performing the behavior or people’s perception of their ability to

perform a given behavior”. PBC is referred as the degree to which a person feels difficulty or ease in certain behavior performance or PBC is described as the degree to which a person feels that he/she has control over the factors (internal/external) which prevent or facilitate the performing of a behavior (Ajzen, 1991).

A person belief towards these internal and external factors which impede or facilitate the performing of a behavior is called control beliefs. The required recourses and opportunities that are associated with control beliefs composed perceived behavior control; this conception is based on two components: self-efficacy (the internal notion of perceived ability) (Bandura, 1991) and facilitating condition (external constraints) (Harry C Triandis, 1979). Individuals are involved in certain behavior when the individual believe that they have essential resources and the confidence for performing a behavior. TPB postulates that person’s behavioral intention is affected by perceived behavior control (Ajzen, 1991). Furthermore, foregoing writings have variously supported the PBC-intention association and found that PBC has a considerable predictor of intention (Hsieh, 2015; Sadaf et al., 2012).

Researchers in the area of marketing and consumer behavior agree that perceived behavioral control as one of the most important antecedents of halal cosmetic purchase intention. A. Aziz et al. (2013) conducted a study in Malaysia to determine factors that influence consumer intentions towards halal cosmetics in Malaysia. This study found that perceived behavioral control has a significant influence on halal cosmetics products intentions. In consensus with (A. Aziz et al., 2013), it was revealed by Kaur and Osman

(2014), who conducted a study in Malaysia to investigate effective halal cosmetic buying behavior factors. The results of this study showed that the relationship between perceived behavioral control and halal cosmetic behavioral intention is positive.

Furthermore, in the USA, Yeon Kim and Chung (2011) conducted a study on 207 US consumers to assess antecedents of consumer purchase intentions towards organic personal care products. Their results showed that the relationship between perceived behavioral control and consumer intention towards organic personal care products is significant. Similarly, in another related study (J. Strauss & Kleine Stüve, 2016) highlighted this positive relationship in their findings.

In addition, a study was done by Bachleda et al. (2012) to examine the factors that affect Moroccan consumers intention to purchase skin care products showed that the association between perceived behavior control and behavioral intention is positive and significant. On a similar vein, Ferraz (2011) claimed that perceived behavior control significantly contributes to the variance in intention to buy personal care products.

In contrast, (N. U. Ansari & Mohammed, 2015; Holst & Iversen, 2011; Nguyen, 2014; Saleem & Recker, 2014) contradict with the findings of (A. Aziz et al., 2013; Bachleda et al., 2012; Ferraz, 2011; Kaur & Osman, 2014; J. Strauss & Kleine Stüve, 2016; Yeon Kim & Chung, 2011) that perceived behavioral control has effect on consumer intentions towards cosmetic products. They found that perceived behavior control has an insignificant effect on consumer intention towards cosmetic products.

Noteworthy, many of the previous studies have underscored the significance of perceived behavior control on purchase intentions for cosmetic products, albeit with contrasting results (e.g. N. U. Ansari & Mohammed, 2015). Concisely, on the balance of all the foregoing empirical discoveries, it looks as if the proven position is that a positive relationship between perceived behavior control and consumer purchase intentions for cosmetic products does exist. Nevertheless, such an association has not remained unchallenged and studies have not resolved the lack of unanimity in findings. Therefore, inconsistency in scholarly literature regarding this relationship calls for more research to examine this relationship better. The following Table 2.11 shows that the past researchers investigate the relationship between perceived behavior control and behavioral intentions (cosmetic domain).

Table 2.11
Summary of past research examining the relationship between perceived behavioral control and behavioral intention (cosmetic domain)

Author	Country	Dependent variable	Results
Yeon Kim and Chung (2011)	USA	Behavioral intention	Significant
A. Aziz et al. (2013)	Malaysia	Behavioral intention	Significant
Saleem and Recker (2014)	Germany	Behavioral intention	Insignificant
Holst and Iversen (2011)	Germany/Denmark	Behavioral intention	Insignificant
N. U. Ansari and Mohammed (2015)	Pakistan	Behavioral intention	Insignificant
Bachleda et al. (2012)	Morocco	Behavioral intention	Significant

Nguyen (2014)	Vietnam	Behavioral intention	Insignificant
J. Strauss and Kleine Stüve (2016)	Germany	Behavioral intention	Significant
Kaur and Osman (2014)	Malaysia	Behavioral intention	Significant
Ferraz (2011)	Portugal	Behavioral intention	Significant

2.8.6 Antecedents of perceived behavioral control

According to Westaby (2005a), perceived behavioral control reasoning approach help individuals that they rationalized or justify their decisions and enhance or protect their self-worth. Furthermore, PBC reasoning approach leads towards better prediction of intention and behavior. Despite the importance of PBC reasoning approach, until recently, the empirical studies on consumption related variables in general and cosmetic (halal/conventional) consumption, in particular, predominantly ignored the PBC reasoning approach by the researchers (Abd Rahman et al., 2015; Ahlam Nuwairah Ahmad et al., 2015; A. Aziz et al., 2013; A. J. C. M. Hashim & Musa, 2013; J. C. M. Hashim & Rosidah Musa, 2014; Hussin et al., 2013; H. Y. Kim, 2009; Kyung, 2012; Majid et al., 2015; Musa, 2014; Norafni Farlina binti Rahim, 2015; Tajeddini & Nikdavoodi, 2014; Teng & Jamaliah, 2013; Yeon Kim & Chung, 2011).

Therefore, it is a dire need for the researcher to employed PBC reasoning approach for better and accurate understanding of the theoretical mechanism of the research model and enhancing predicting power consumer intentions towards halal cosmetic products. Hence, this study breaks down perceived behavioral control reasons into self-efficacy and

government support to narrow down this gap because there is growing empirical evidence that self-efficacy and government support are critical to the decision-making process and powerful predictor of consumer behavior (e.g. Al-Majali & Nik Mat, 2010; M. Tan & Teo, 2000; Teo & Pok, 2003).

2.8.6.1 Self-Efficacy

In the social cognitive theory, self-efficacy was the main construct established by (Bandura, 1986). Self-efficacy is defined as “the confidence one feels about performing a particular behavior, including confidence in overcoming the barriers to achieving that behavior” (Bandura, 1986). Ajzen (1991) stated that individual's intention and behavior is strongly affected by their confidence in the ability to perform towards the behavior.

Strahan, Spencer, and Zanna (2002) reported that individuals who have a higher degree of self-efficacy would be more likely to engage in health behavior because they have a strong believe that they can succeed. Therefore, the stronger believe of the individual in their self-efficacy, the higher their obligation to engage in the intended behavior (Locke & Latham, 1990). In other words, individual self-efficacy would have a positive relationship with intention towards certain behavior and the behavior itself. Moreover, Schwarzer and Fuchs (1996) found that high self-efficacy in individuals was linked to high achievement, better health, and excellent social integration.

In different behavioral contexts, such as fruit and vegetables consumption (Brug, Lechner, & De Vries, 1995; Povey, Conner, Sparks, James, & Shepherd, 2000), alcohol drinks

(Christopher J Armitage & Conner, 1999), physical exercise (Terry & O'Leary, 1995; Weinberg & Gould, 2014) and intention to get a mammogram (Rutter, 2000; Tolma, Reininger, Evans, & Ureda, 2006), the results showed that increased self-efficacy would enhance the intention towards the behavior. Self-efficacy was a significant predictor of consumer behavior and has been confirmed by numerous researchers (Al-Majali & Nik Mat, 2010; Hsieh, 2015; Nor & Pearson, 2008; Shih & Fang, 2004).

Nor and Pearson (2008) established that self-efficacy is a significant predecessor of perceived behavior control and may be adequate for predicting consumer intentions. In a more recent study, Hsieh (2015), similarly concurs with Nor and Pearson (2008) as their findings highlighted that self-efficacy have a strong and positive relationship with perceived behavior control and have a significant effect for predicting consumer intentions. In line with that, Al-Majali and Nik Mat (2010) confirmed the same relationship. The self-efficacy's relationship with perceived control behavior is not a general belief; other research findings do not support this relationship. For example, Tsai et al. (2015) say that self-efficacy was not a noteworthy predecessor of perceived behavior control and may not be adequate for predicting consumer intentions.

Relationship of self-efficacy with perceived behavior control has been critical for the prediction of consumer intentions. However, much has been learned regarding this relationship in diverse domains such as online banking, online shopping, education or food, but this relationship has been predominantly ignoring by researchers in halal domain in general or halal cosmetic in particular (e.g. Abd Rahman et al., 2015; Afendi, Azizan, &

Darami, 2014; Nor & Pearson, 2008; Sadaf et al., 2012; Tsai et al., 2015). Tolma et al. (2006) have mentioned that there is a need to verify the validity of self-efficacy construct in different behavioral context and among different samples. The main objective of present study is to examine factors that may influence consumer behavioral intentions to purchase halal cosmetics. Thus, to motivate people to purchase halal cosmetics, to change their non-halal consumption habit and to sustain the positive behavior towards halal consumption needs strong internal self-efficacy.

In the above discussion, results indicate that the relationship among self-efficacy and perceived control behavior has inconsistent results and therefore sought to challenge the widely held intuition that consumer intentions are significantly impacted by the encouraging relationship of self-efficacy towards perceived behavior control. In addition, this relation of determining the influence of an individual's ability to decide to purchase halal cosmetics has not been paid proper attention by the previous researcher, so this study attempts to narrow down this gap. Based on above discussion, self-efficacy is an important factor that affects individual perceived control behavioral. Therefore, this study investigates the effect of self-efficacy on perceived behavioral control towards the intention of halal cosmetics in Pakistan. The following Table 2.12 shows a summary of past research examining the relationship of self-efficacy and perceived behavior control.

Table 2.12

Summary of past research examining the self-efficacy's relationship with perceived control behavior towards intention

Author	Country	Dependent variable	Results
Shih and Fang (2004)	Taiwan	Perceived behavior control	Significant

Nor and Pearson (2008)	Malaysia	Perceived behavior control	Significant
Al-Majali and Nik Mat (2010)	Jordan	Perceived behavior control	Significant
Tsai et al. (2015)	Taiwan	Perceived behavior control	Insignificant
Hsieh (2015)	Taiwan	Perceived behavior control	Significant

2.8.6.2 Government Support

Government support means government decisions and actions that affect the behavior and decisions at all levels of households and companies (Amin et al., 2011). The government perspective is vital in facilitate or impedes individual behavior (Le Chi Hai, 2015; Scupola, 2003; Tornatzky, Fleischer, & Chakrabarti, 1990). Consumers required consistent government support and the introduction of sound legal regulations for confidence and high purchase intentions (Le Chi Hai, 2015). Involvement of government is very important for increasing trust (Hampton-Sosa & Koufaris, 2005; Welch, Hinnant, & Moon, 2005), especially at the initial stages of trust (Zucker, 1986). Susanto, Lee, Zo, and Ciganek (2013) study findings indicate that government support considerably impacts to build initial trust, consumers initial trusting beliefs are significantly influenced by government support. We defined government support as

“The facilitation of the condition which translates into how available the resources which are needed for the behavior are to be carried out”(Harry C Triandis, 1979).

Government support has a positive impact on the health and development of halal cosmetics, but there is a lack of government support for halal Islamic products. Centralized Shariah board for the development of halal regulations and halal certification, pricing control policies and a number of events e.g. seminars and workshop for the awareness of halal cosmetics are the core concern of the government for the development of halal products (State of the global Islamic economy report, 2014).

Recently Muslims start believing on logos to trust that the products that they are using are prepared according to halal rules (Nasir, Norman, Fauzi, & Azmi, 2011). Ab Talib and Johan (2012) stated that halal logo is one of most important in factor in halal products buying and is a major influential factor for Muslims in halal product decisions. Halal logos ensure the safety, healthiness, and compliance of product prepared according to Islamic and Shariah law.

A study conducted by (Anir, Nizam, & Masliyana, 2008; Anir, Nizam, Masliyana, et al., 2008) revealed several issues faced by Muslims consumers regarding the validation of halal logo in purchasing halal products. In the study, it is proven that it is a core concern for the authorities and manufacturer to provide adequate knowledge to consumers to validate halal status during buying process because consumers have to be influenced by only on product final packaging, containing the halal logo. Studies also revealed that 78% respondents questioned about the authentication of halal certification and 66% have uncertainties about halal logo exhibited on the packaging as many are faked. Validating halal status is the core concern of Muslims in purchasing halal products (Ab Talib & Johan, 2012). Validating

halal status is only possible through well-defined rules and regulations regarding halal certification. For halal certification, government support is required.

More than 90 % of people in Pakistan are consuming non-halal products because there is no legislative support, which is alarming for both consumers and government (Salama, 2015). Numerous researchers have validated that government support has a significant effect on consumer's intentions (C.-Y. Lin & Ho, 2009; Mauro C. Hernandez & Afonso Mazzon, 2007; Ramanathan, Ramanathan, & Ko, 2014; Susanto et al., 2013; Yee-Loong Chong & Ooi, 2008; Zainab, Bhatti, Pangil, & Battour, 2015).

In the above mentioned paragraph literature shows the importance of government support in the halal domain but the role of government support has been extensively discussed in consumption related variables of information technology, e-training, internet banking, logistic and supply chain domain (e.g. C.-Y. Lin & Ho, 2009; Mauro C. Hernandez & Afonso Mazzon, 2007; Ramanathan et al., 2014; Susanto et al., 2013; Yee-Loong Chong & Ooi, 2008; Zainab et al., 2015).

To date, there is a dearth of studies who investigate the effect of government support on consumption related variables in the halal domain or particular in the halal cosmetic domain. Teo and Pok (2003) point out that government support is shown as one of the most important antecedents of perceived behavior control. In relation to that (Al-Majali & Nik Mat, 2010; M. Tan & Teo, 2000) discuss the relationship of government support and

perceived behavior control. The results indicate that government support is significant and positive influences on the perceived behavior control.

In contrast (Mauro C. Hernandez & Afonso Mazzon, 2007) indicate that government supports insignificant influence on perceived behavior control. This conflicting past results of the relationship between government support and perceived behavior control calls for more research to examine this relationship better. The following Table 2.13 shows a summary of past research examining the relationship between government support and perceived behavior control.

Table 2.13

Summary of past research examining the relationship between government support and perceived behavior control

Author	Country	Dependent variable	Results
Teo and Pok (2003)	Singapore	Perceived behavior control	Significant
Mauro C. Hernandez and Afonso Mazzon (2007)	Brazil	Perceived behavior control	Insignificant
M. Tan and Teo (2000)	Singapore	Perceived behavior control	Significant
Al-Majali and Nik Mat (2010)	Jordan	Perceived behavior control	Significant

2.8.7 Religion

In order to understand religiosity, the concept of religion must first be elucidated. No consensus has yet been reached amongst researchers relating to the definitions of religion; the available definitions are either confusing or unclear (Emmons & Paloutzian, 2003; Hill et al., 2000). What is one person certain to describe someone as religious may be entirely

different from another person's understanding? This happens because of the interaction between religion, traditions, and cultures (Hood, Hill, & Spilka, 2009). It is hard to look for a generally accepted meaning of religion. Clarke and Byrne (1993) recognized three wellsprings of uncertainty about the possibility of creating a satisfactory meaning of religion. They related to (1) unclarities and conflicts in the conventional utilization of the term; (2) the confused definition left to the term from its history; and (3) the conspicuous divergence in academic purposes and ways to deal with the meaning of religion. Among the numerous kinds of definition, religion has been characterized as:

“Religion is a system of symbols which acts to establish powerful, pervasive, and long-lasting moods and motivations in people. These are created by formulating conceptions of a general order of existence which are accepted by the believer as factual and uniquely realistic” (Geertz, 1993).

“A belief in God accompanied by a commitment to follow principles believed to be set forth by God” (McDaniel & Burnett, 1990).

“A socially shared set of beliefs, ideas, and actions that relate to a reality that cannot be verified empirically yet is believed to affect the course of natural and human events”(Terpstra & David, 1991).

“An organized system of beliefs, practices, rituals and symbols designed (a) to facilitate closeness to the sacred or transcendent (God, higher power or ultimate truth/reality), and

(b) to foster an understanding of one's relation and responsibility to others in living together in a community"(Harold George Koenig, McCullough, & Larson, 2012).

"A social arrangement designed to provide a shared, collective way of dealing with the unknown and unknowable aspects of human life, with the mysteries of life, death and the different dilemmas that arise in the process of making moral decisions" (A. G. Johnson, 2000).

"A cultural subsystem that refers to a unified system of beliefs and practices relative to a sacred ultimate reality or deity" (Arnould, Price, & Zinkhan, 2004).

"A system of beliefs about the supernatural and spiritual world, about God, and about how humans, as God's creatures, are supposed to behave on this earth" (Sheth & Mittal, 2004).

In summary, one common theme emerging from these views of religion is that it has an influence on people's lives and affects the way they behave. After reviewing what the literature had to say about religion definition, it becomes clear that religion is hard to assess despite many attempts by many scholars. L. Jones, Eliade, and Adams (2005) argued, "There is a very wide spectrum of opinions as to the most serviceable definitions of religion". And this is not only due to the very wide spectrum or opinion about it only but also due to the difficulty in gathering data from consumers relating to their religious beliefs and how they apply their belief in their daily life which is considered not only personal but also, it is regarded as confidential information to many. The diversity of definitions that

have been proposed to characterize the idea of religion shows that there is no accord on a general sense to this word.

2.8.7.1 Religious affiliation and Consumer behavior

Two key perspectives of religion have been viewed or identified from the literature review: (1) religious affiliation and (2) religiosity or religious commitment (Jamaludin, 2013).

Religious affiliation refers to the religious identification of a person or religious denominational membership or adherence of individuals to a specific religious group.

Religious affiliation was measured by getting some information about the religions with which they distinguished (Christian, Hindu, Buddhist, Muslim, Judaism, and Protestant).

Religious affiliation depicts “cognitive system” of the society. Followers of the particular religious group (Christian, Hindu, Buddhist, Muslim, Judaism, and Protestant) maintained the principal beliefs, values, and practices of their religion.

Several past studies discussed the influence of religious affiliation and consumer behavior. Bailey and Sood (1993) conducted a study in the USA to understand effects of religion affiliation and consumer behavior. The data of this study was collected from six religious groups (Christian, Hindu, Buddhist, Muslim, Judaism, and Protestant). They pointed out that people of different religious groups have different consumer behavior. In a similar vein, Jamaludin (2013) conducted a study in Malaysian context to investigate the relationship between religious affiliation and investment choice decision. The results indicate that there were statistically significant differences in consumer behavior of different religious groups.

Essoo and Dibb (2004) conducted a study in Mauritius to examine contrasting shopping behavior of three religious groups (Muslim, Hindus, and Catholics). The findings indicate that Hindus, Muslim, and Catholics were significant to differ in their shopping behavior. Furthermore, Siala, O'Keefe, and Hone (2004) conducted a study to investigate the effect of religious affiliation on trust in the context of electronic commerce. They asserted the relationship between religious affiliation and consumer behavior.

Marketing and consumer behavior researchers suggest that the influence of religious affiliation on consumer behavior is not limited to the purchase of durable goods but also its effects on service providers. In an investigation of hospital centers, Nix and Gibson (1989) found that religious affiliation is significant affects hospital selection that leads towards overall patient satisfaction. In concurrence to (Nix & Gibson, 1989), Andeleeb (1993) confirmed that individuals who belong to a particular religious group show more trustworthiness for the hospitals, tagged to their religion. It is clear from the literature reviewed that different religions have a different impact on consumer behavior. The following Table 2.14 shows the past researchers studies that investigate the religious affiliation influence on consumer behavior.

Table 2.14

Summary of past research examining the relationship between religious affiliation and consumer behavior

Author	Sample	Product	Dimension	Focus of the study
Bailey and Sood (1993)	Buddhist (n = 28) Catholic (n = 90) Hindu (n = 16) Islam (n = 40)	Stereo sound system	Religious affiliation	Shopping behavior

	Jewish (n = 31)			
	Protestant (n = 107)			
	Non-religious (n = 37)			
Essoo and Dibb (2004)	Hindu (n= 324) Catholic (n = 198) Muslim (n = 78)	Television set	Religious affiliation	Shopping behavior
Siala et al. (2004)	Christian (n = 29) Muslim (n = 38) Others (n = 24)	Books	Religious affiliation	Trust in e-commerce
Nix and Gibson (1989)	Former patients (n = 200)	No product involved	Religious affiliation	Selection of hospital and patient satisfaction
Andeleeb (1993)	Patients (n=130)	No product involved	Religious affiliation	Hospital selection and evaluation of medical services
Jamaludin (2013)	Employee provident fund (EPF) members (n=440)	No product involved	Religious affiliation	Choice of investment decision

2.8.7.2 Religiosity and Consumer Behavior

In marketing literature, rather than focusing on the concept of religion, researchers concentrate on the concept of religiosity because it reflects how an individual adopts such a religion, which intersects with behavior (e.g. Abd Rahman et al., 2015; N. U. Ansari & Mohammed, 2015; Z. A. Ansari, 2014; Mokhlis, 2009; Mukhtar & Mohsin Butt, 2012).

Religiosity can be defined as “the extent to which an individual is committed to his religion and to which that religion is reflected in the individual’s attitudes and behavior” (B. R. Johnson et al., 2001). Or we can say that religiosity is a measure of religiousness of persons

(O'connell, 1975). Religiosity is “continuous rather than a discrete variable” (Argyle & Beit-Hallahmi, 2014). Everyone have a certain degree of religiosity in life. McDaniel and Burnett (1990) define religiosity in these words “a belief in God accompanied by a commitment to follow principles believed to be set by God”. Another definition of religiosity is “the condition or state of being religious” (O'Brien, Palmer, Barrett, & Swanston Graphics, 1993).

Religion and an individual's level and type of religiosity affect human behavior in terms of the demarcation of moral standards, thoughts, judgments, attitudes and actions (Cohen & Hill, 2007). A person's level of religiosity influences his or her preferences and choices when buying products (Choi, Paulraj, & Shin, 2013; Muhamad & Mizerski, 2013; Wilkes, Burnett, & Howell, 1986), and consumer decision-making generally (Choi, 2010; Swimberghe, Flurry, & Parker, 2011). More specifically, it can be said that religion can directly influence consumer favoritism through religious doctrine (Muhamad & Mizerski, 2013; Pace, 2013). An example of this is seen in the eating habits of Muslims, who will often select halal food when buying or eating out, just as Hindu consumers will refrain from eating beef. This is due to the individual's choice, or sense of duty, to follow their religion's teachings.

Religiosity has been shown to influence consumption indirectly by significantly contributing to an individual's norms, ethical beliefs, and values (Bailey & Sood, 1993; Essoo & Dibb, 2004; Muhamad & Mizerski, 2013). For instance, many Muslims believe that collecting interest on money is considered a serious sin. This affects how they use

financial services, and how banks target and communicate with these religious customers. Another instance could also be seen in the Islamic practice of wearing a headscarf, a religious norm that can often affect the way in which Muslim women engage with fashion.

However, due to the complex and personal nature of religiosity and issues relating to its conceptualization and measurement, religiosity as a subject related to consumer behavior has continued to be under-researched (Cleveland & Chang, 2009; Islam & Chandrasekaran, 2015; Kahle et al., 2016; Swimberghe et al., 2011). As a result, there is still a need to develop a more advanced understanding of how religiosity impacts on consumer behavior (Muhamad & Mizerski, 2013; Swimberghe et al., 2011; Vitell, 2009).

Numerous marketing scholars discussed the relationship between religiosity and consumer behavior. Rehman and Shahbaz Shabbir (2010) conducted a study in Pakistan to examine the relationship between religiosity and new product adoption. The data was collected from 300 university students by using convenience sampling technique. Religiosity represents the independent variable and new product adoption represents the dependent variable. The findings of this study indicate that religiosity affects new product adoption among Muslims consumers. This finding is letter support by Z. A. Ansari (2014), who conduct a study in Saudi Arabia to investigate the association between religiosity and new product adoption. This study is based on primary data collected from 300 Muslims consumers by employed convenience sampling technique. The finding of this study found that the association between religiosity and new product adoption is significant.

Echchabi and Aziz (2012) address the influence of religiosity on the adoption of Islamic banking services in the context of Morocco by focusing Muslims consumers. The results indicate that religiosity has a significant positive influence on the adoption of Islamic banking services. Furthermore, to examine the relationship between religiosity and diffusion rate of innovation, Azam, Qiang, Abdullah, and Abbas (2011) conducted a study in china. A sample of 400 Muslim respondents from three universities of Chongqing was exposed to investigate this relationship. Empirical results of this study confirm the influence of religiosity on the diffusion rate of innovation.

In addition, the significant relationship between religiosity and adoption of the new product regarding pharmaceutical products is confirmed by Baig and Baig (2016) in their study which was conduct in Pakistan. Alternatively, the relationship between religiosity and purchase intentions of halal products is significant in a study conducted by Mukhtar and Mohsin Butt (2012) in Pakistan.

In Malaysia context, Alam, Jano, Wel, Aniza, and Ahsan (2012) conducted a study to investigate the impact of religiosity on purchase intention towards Islamic home financing. 300 questionnaires are collected from Muslim respondents to analyze the relationship by using convenience sampling technique. Results show that religiosity has a significant impact on the intention of Islamic home financing. Furthermore, Amin and Territory (2010) tackled the influence of religiosity on Tabung Haji Customers in Malaysia to use ATM banking. The results showed that the relationship between religiosity and usage intention of ATM banking is significant and positive.

Shaharudin, Pani, Mansor, and Elias (2010) developed a theoretical framework based on TPB with an added new construct religiosity to examine which factor affecting purchase intention of organic foods. The results of the study showed that the relationship between religiosity and purchase intention of organic food is insignificant in Malaysia. Furthermore, based on TPB, Bachleda et al. (2014) conducted a study on Moroccan Muslims women's, to investigate the influence of religiosity on clothing choice. Results confirmed that religiosity has an insignificant effect on clothing choice among Moroccan Muslims women's.

In the Malaysian context, Jamaludin (2013) conducted a study to explore the relationship between religiosity and individual investment decision choice. 440 employees are investigated in this survey. The findings of this study indicated that the relationship between religiosity and individual investment choice is insignificant and negative. In line with that, additionally, Hanazee, Attar, and Alikhan (2011) found empirically that the relationship between religiosity and new product adoption intention is insignificant among Muslim male and females. The evidence for whether religiosity affects consumer behavior is mixed from the literature reviewed so far. While some studies do show a positive effect, others do not. The following Table 2.15 shows the past researchers studies that investigate the religiosity influence on consumer behavior.

Table 2.15

Summary of past studies that examining the relationship between religiosity and consumer behavior

Author	Country	Sample	Findings
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Rehman and Shahbaz Shabbir (2010)	Pakistan	University students (n=300)	Religiosity significantly affects new product adoption among Muslims consumers.
Z. A. Ansari (2014)	Saudi Arabia	Muslim consumers (n=300)	The association between religiosity and new product adoption is significant.
Echchabi and Aziz (2012)	Morocco	Bank customers (n=300)	Religiosity has a significant positive influence on the adoption of Islamic banking services
Azam et al. (2011)	China	University students (n=400)	Empirical results of this study confirm the influence of religiosity on the diffusion rate of innovation.
Baig and Baig (2016)	Pakistan	University students (n=500)	The significant relationship between religiosity and adoption of new product regarding pharmaceutical products is confirmed
Mukhtar and Mohsin Butt (2012)	Pakistan	University students (n=500)	The relationship between religiosity and purchase intentions of halal products is significant
Alam et al. (2012)	Malaysia	Muslim respondents (n=300)	Results show that religiosity has a significant impact on the intention of Islamic home financing
Amin and Territory (2010)	Malaysia	Haji customers (n=140)	The results showed that the relationship between religiosity and usage intention of ATM banking is significant and positive.
Shaharudin et al. (2010)	Malaysia	Malaysian consumers (n=150)	The results of the study showed that the relationship between religiosity and purchase intention of organic food is insignificant
Bachleda et al. (2014)	Morocco	Muslim women's (n=950)	Results confirmed that religiosity has an insignificant effect on clothing choice

Jamaludin (2013)	Malaysia	Employees (n=440)	The relationship between religiosity and individual investment choice is insignificant and negative.
Hanazee et al. (2011)	Iran	Muslims Students (n=460)	The relationship between religiosity and new product adoption intention is insignificant

2.8.7.3 Dimensions of Religiosity

Religiosity has received broad discussions among various disciplines including, but not limited to, management, psychology, anthropology, and philanthropy. Some authors considered religiosity as a unidimensional construct (Bergan & McConatha, 2001), two-dimensional construct (Allport & Ross, 1967), three-dimensional construct (Souiden & Rani, 2015), In addition, some considered four-dimensional construct (Ellison, 1991), while some other researchers considered five-dimensional construct (Glock, 1972). Similarly, some considered six-dimensional construct (Verbit, 1970) and some studied religiosity as a ten-dimensional construct (King, 1967). However, despite these broad discussions, there is no standardized and universally agreed scale to measure religiosity (Souiden & Rani, 2015). There are three reasons for this. First, there is no universally accepted definition of religiosity (McDaniel & Burnett, 1990). Second, due to the existence of many religions over the history of humankind, the ways of conceptualizing religiosity and religious rulings are diverse, varied and subject to influence by many factors (Hood et al., 2009). Third, the complexity and sensitivity of religion as a subject for each individual makes it very hard to form a universal scale (Bailey & Sood, 1993; Hirschman, 1983a, 1983b).

Researchers have selected their measures depending on the context of individual research. It has been confirmed by numerous marketing and consumer behavior researchers that two-dimensional construct of religiosity or two-factor solution (i.e. intra-personal/inter-personal) is the most accepted and used measure for testing religious influences in people's behavior (Benk, Budak, Yüzbaşı, & Mohdali, 2016; Mokhlis, 2006, 2009; Muhamad & Mizerski, 2013; Mukhtar & Mohsin Butt, 2012; Putrevu & Swimberghek, 2013; Swimberghe, Sharma, & Flurry, 2009; Worthington Jr et al., 2003). Also, this particular scale is the most extensively used in research relating to religious consumer behavior (Vitell, 2009). Therefore, two-factor solution, one reflects a cognitive dimension of religiosity (intra-personal) and other reflect a behavioral dimension of religiosity (inter-personal) was the selected measure for this thesis.

2.8.8 Generation

There are two quite different meaning to describe generation in the daily culture, which is referring to kinship and the other to membership of age group. The kinship emphasizes on private sphere of the family relation, and the latter to the public sphere of age cohort (Biggs, 2007).

Age has been recognized as one of a basic element in the social structure and the life course. The sociological literature divides age into two general perspectives: the socio-cultural and the cohort historical (Elder, 1975). The term of generation has been widely used in the daily term to differentiate and grouping based on the age (Pilcher, 1994). A traditional generation has been defined as the average interval time between the birth of parents and

their children, this makes a generation usually (approximately) last in 20 years to 30 years. However, this rule of thumbs can be obsolete, because presently technology, education, social values are changing rapidly and it will be affecting to their characteristic, Moreover, the interval time between the birth of parents and the children has stretched from two decades to three decades (W. Strauss & Howe, 1991).

Presently, the commonalities of today's generation wipe out the racial or ethnic, and socio-economic boundaries due to globalization and better education (W. Strauss & Howe, 1991). Currently the world is populated by three large generations; the first is Baby Boomer for those who were born in the post-world war era, the highest age band in the history numbering almost 72 million persons, the second generation is generation X and lastly the generation Y (Jorgensen, 2003; Pesquera, 2005; Reisenwitz & Iyer, 2009).

2.8.8.1 Baby Boomer

A baby boomer is officially for those who were born in the year 1943 until 1961 or right after the end of World War 2 (Jorgensen, 2003; Roof, 1993). The exact date or time definition for baby boomer still vary significantly and far away from consensus, different individuals, scholars, groups or organizations may have acknowledged differently (L.-V. Cox, 2016). But they identified this group based on both technically and culturally (L.-V. Cox, 2016; Jorgensen, 2003). Describing characteristic of a broad generation is quite difficult and some of them believe that it is impossible. Nonetheless, several scholars or researchers have attempted to identify the broad characteristic of the baby boomer

generation (e.g. L.-V. Cox, 2016; James, Wirth, Harville 2nd, & Efunbumi, 2016; Jorgensen, 2003; Schofield & Beard, 2005).

The terminology of baby boomer originally come from the phrase baby boom, which has been widely used in the late twentieth century, this phrase refers to the noticeable phenomena of increasing of birth rate (L.-V. Cox, 2016). According to (Green, 2006), this generation can be divided into two cohorts: A leading age boomer is a person born between 1943 until 1955 those who came during Vietnam War era, and the other half are people born between 1956 until the early 60s, this called late boomer.

The baby boomer grew up in the dramatic period of social change, as the world just ended the World War era (Green, 2006), that social change marked the generation with a strong cultural cleavage, between the proponents of social change and the more conservative. Baby boomer was raised in the prosperous economic time, they are an optimist and expecting the world progress as the war just ended (L.-V. Cox, 2016). This generation did not grow up with technology; as a result, they view technology as 'artifact' of organizational culture (Simons, 2010). Baby Boomer enjoys their autonomy life and focuses on their own hobbies such as playing golf, gardening, volunteering, etc. Baby boomer prefers having flexible working hours and working remotely (L.-V. Cox, 2016; Hewlett, Sherbin, & Sumberg, 2009).

The baby boomers have widely defined itself through work and such has difficulties to accept something new e.g. innovation that might align them (L.-V. Cox, 2016). Moreover,

the baby boomer is emphasizing basic literacy fundamental, while the generation Y is lacking basic literacy, in another hand, the baby boomer is having a lack of digital connectivity (M. A. Ahmad & Tarmudi, 2012). In terms of consumerism, the baby boomer has a lower level of consumerism with fewer choices of products or services (W. S. Smith, 2010). Baby Boomer exhibits the least behaviorally differentiated purchasing patterns of any generation. This apparent behavioral flatness is due to the fact that there is often more behavioral variation between different groups of Boomers than between Boomers overall and the pre- and post-Boom populations which bracket them (Green, 2006).

2.8.8.2 Generation X

The generation X refers to an adult who was born between the early 60s until early 80s, or presently 35 to 50 years old (L.-V. Cox, 2016). The term of generation X was used for describing various subculture or counterculture after World War in the early 1950s (Ulrich & Harris, 2003). Generation X born after western post-World War II baby boom, this generation is the first generation ever to grow up in the beginning of technology era or perhaps it is the most extensively wired generation. In the workforce, generation X has the characteristic hard working individual and many of them continue to study higher education (L.-V. Cox, 2016; Miller, 2011; Reisenwitz & Iyer, 2009).

Generation X members were largely latch-key children, probably they grew up in the single parent family where direct supervision and family attachment were intense. As a result of their family situation, generation X members are thought to be cynical and pessimistic (L.-V. Cox, 2016; Kupperschmidt, 1998; Mhatre & Conger, 2011). They are private and may

fear intimacy, and are likely to take care of their own needs. Generation X members culturally described as an independent and skeptical individual but in addition, they are resourceful and pretty comfortable with technology and willing to use that technology (Borges, Manuel, Elam, & Jones, 2006).

There are many studies about generation X attitudes, preferences and characteristic for example generation X are more cynical, less optimistic, less idealistic, and less bound to a traditional value system. Additionally, generation X is pretty skeptic towards life (Mhatre & Conger, 2011). Generation X has a risk averse characteristic; they have a tendency to avoid risk or prefer safer way. Regarding technology generation X is technologically adapting and tend to use the technology (L.-V. Cox, 2016; Reisenwitz & Iyer, 2009).

This generation spends more than 40 hours per week working and commuting. Generation X was more likely to be employed and was working and commuting significantly. Young men were more likely to be in the workforce and work more hours compared to young women. Generation X adult with the highest levels of education was more likely to be employed and reported the longest workweeks (Miller, 2011; Reisenwitz & Iyer, 2009).

In terms of technology, this generation grew up in the beginning of technology era, personal computer and the internet were in the expansion time and most of the household used them at that time (Meier & Crocker, 2010). Generation X has grown up with the internet era. Most of them have their own computer during school years or at their home. The entire young adult generation X who enter the college experienced a good computer

literacy. In their 20s the internet became popular and it was a prominent part of life, and they have experienced the massive growth of the internet and wireless communication during a couple of decades (Pendergast & Pendergast, 2000). In 2009 it was reported that almost 97% generation X using internet services regularly. Mostly they used the services to obtain maps and directions. Another eighty percent used the internet to gather information about health and medical. Which 75% percent of them said that they have used the Internet to pay bills and manage their bank account through electronic banking. Another small portion, about 40% of generation X, said using the internet to buy books, clothing, and electronic online. It is obvious that they are pretty comfortable in the technological era and make extensive use of this technology (Miller, 2011).

Reisenwitz and Iyer (2009) pointed out that generation X is technological savvy and will use technology to personalize and humanize everything. Generation X is the first generation moving the internet into the mainstream. Professionals from generation X are highly comfortable with World Wide Web (WWW) and entail as business media. A Recent survey conducted by Longitudinal Study of American Youth has revealed that generation X indicated they make extensive use and embraced in several of social networking sites. Mostly members of generation X have their own account in social media such as Facebook, Twitter, and YouTube (Miller, 2011).

2.8.8.3 Generation Y

In every generation, they have a unique characteristic, various similarities or differences in them that can be used as an overview on how they behave. Obviously, it is very important

for a marketer or even researcher who should know about this potential consumer (Schewe & Noble, 2000). One of the biggest generations is the generation Y. This generation known for the diversity therein is generation Y or commonly known as the Millennial. Gorman, Nelson, and Glassman (2004) declared that the arrival of the Generation Y represents one of the most significant powers affecting business today. Generation Y or Millennial Generation, is a term used to portray those who were born after Generation X (Khalid, Nor, Ismail, & Razali, 2013). To limit this generation, one can divide this generation for one who born between 1980 until 2000 (Mothersbaugh, Hawkins, Mothersbaugh, & Tom, 2016; Pesquera, 2005; Reisenwitz & Iyer, 2009; Schewe & Noble, 2000).

Generation Y (Gen Y), aged between 16 and 33, are the children of the “Baby Boomers” generation or “Generation X” (Mothersbaugh et al., 2016). They are characterized by a strong sense of independence and autonomy. They are also assertive, self-reliant, emotionally and intellectually expressive, innovative, and curious. The generation Y is the generation who received education better than preceding generation (Kaifi, Nafei, Khanfar, & Kaifi, 2012).

2.8.8.4 Rationale for choosing Generation Y

Generation Y is an influential and unique consumer group whose behavior is repeatedly examined but not fully understood (Drake-Bridges & Burgess, 2010; Noble, Haytko, & Phillips, 2009; Pitta & Taken Smith, 2012; Racolta-Paina & Luca, 2010). This generation is an attractive market because of two things. First, preferences and tastes are formed during the juvenile period can influence the purchase over time. Second, the current youth

are able to spend more on personal consumption as compared to other generations such as baby boomer or generation X (Hawkins & Mothersbaugh, 2012). Many analysts and researchers have forecasted that this generation plays an important role in the twenty-first century (Keating, 2000). Most of the money they earn will be spent on the "feel-good" products or products that can provide comfort for them, such as cosmetics, posters, and ready meals (Solomon & Rabolt, 2009). Generation Y consumers have positive consumption behavior towards organic personal care products (Konrad & Polziehn, 2016). Muslims cosmetic market is the 4th largest market in the world by spending US\$ 58 billion on cosmetic in 2015 (State of the Global Islamic Economy Report, 2016). Muslims are quite younger as compared to non-Muslims (Hackett, 2010). Muslims countries (i.e. Pakistan, Bangladesh, Indonesia, Iran, Saudi Arabia or Malaysia) have the youngest median age compared to non-Muslim countries (i.e. Japan, Germany, Italy, Canada, Russia, Australia or USA). In all over the world median age of Muslims is lie under the generation Y segment relative to non-Muslim (Hackett, 2010). However, there is a scarcity of empirical studies in the past literature that explains the halal consumption from Muslim generation Y point of view (Khalek & Ismail, 2015).

Furthermore, to examine the prevalence and characteristics of generation Y in the field of Islamic marketing, this study reviews the two elite journals of Islamic marketing discipline in term of prestige, contribution to theory and contribution to practice. Such as Journal of Islamic Marketing (JIMA) and International Journal of Islamic Marketing and Barding (IJIMB). This method was selected because it was best suited to examine the prevalence rates (Alise & Teddlie, 2010). Although publications reporting generation Y research in

Islamic marketing might also be found in books and conference articles, researcher agree with Bryman (2006) that journal articles are “a major form of reporting findings (which) have the advantage that, in most cases, the peer review process provides a quality control mechanism. By contrast, conference papers and books are sometimes not peer reviewed”. The author reviewed 169 articles that have published in the elite journals as shown in the Table 2.16. Interesting findings uncovered that only 17 or 13% articles specifically use generation Y as respondents in their studies. Of these 17, only 9 or 7% studies (Adib & El-Bassiouny, 2012; Anis Najiha Ahmad, Yang, & Wan Abdullah, 2015; Ahmed, Nawaz, & Wilson, 2016; Aris, Zzaman, Yang, & Harivaindaran, 2015; Charsetad & Charsetad, 2016; Farrag & Hassan, 2015; Lobo & Elaluf-Calderwood, 2012; Muhamad et al., 2016; Sun et al., 2012) clearly specified the particular generation Y as respondents. Furthermore, of these 8 studies, none of the studies has focus halal cosmetic. The findings of this review are in consensus with Khalek and Ismail (2015), who argue that utilization of generation Y in Islamic marketing in its infancy and received little scholarly recognition.

Table 2.16
Prevalence rate of generation Y in Islamic marketing

Journal	Year	Vol	Issue	Total paper	Empirical paper	Conceptual paper	Literature review paper	Sample G Y	G Y focus area (cosmetic)
JIMA	2010	1	1	6	4	2	0	0	0
JIMA	2010	1	2	7	3	4	0	1	0
JIMA	2010	1	3	6	5	1	0	0	0
JIMA	2011	2	1	7	5	2	0	1	0
JIMA	2011	2	2	7	7	0	0	1	0

JIMA	2011	2	3	8	6	1	1	0	0
JIMA	2012	3	1	8	5	3	0	1	0
JIMA	2012	3	2	7	5	2	0	1	0
JIMA	2012	3	3	4	3	1	0	2	0
JIMA	2013	4	1	6	4	2	0	0	0
JIMA	2013	4	2	6	4	2	0	2	0
JIMA	2013	4	3	6	4	0	2	0	0
JIMA	2014	5	1	8	5	2	1	1	0
JIMA	2014	5	2	8	7	0	1	0	0
JIMA	2014	5	3	7	6	1	0	1	0
JIMA	2015	6	1	8	6	1	1	1	0
JIMA	2015	6	2	6	5	0	1	0	0
JIMA	2015	6	3	8	6	2	0	2	0
JIMA	2016	7	1	7	5	2	0	1	0
JIMA	2016	7	2	6	6	0	0	1	0
JIMA	2016	7	3	6	5	1	0	1	0
JIMA	2016	7	4	7	6	1	0	0	0
IJIMB	2016	1	1	8	5	3	0	0	0

IJIMB	2016	1	2	7	4	3	0	0	0
IJIMB	2016	1	3	5	5	0	0	0	0
Total articles				169	126	36	7	17	0

2.9 Research framework

A framework offers a model of how to make logical sense of the relationships among the several factors that have been identified as important to the problem. These relationships flow logically from the documentation of previous research in the problem area. In sum, the research framework discusses the interrelationship among the concepts or variables that are deemed to be integral to the dynamics of the situation being investigated.

Based on the literature reviewed and suggestions by several studies, this study has developed a framework to investigate the antecedents of consumer's intention towards halal cosmetics in Pakistan. This framework is based on BRT, which includes twelve components as shown in Figure 2.5. These components are: (1) behavioral intention, (2) attitude, (3) subjective norm, (4) perceived behavioral control, (5) religiosity i.e. intrapersonal religiosity and interpersonal religiosity, (6) knowledge, (7) environmental consciousness, (8) health consciousness, (9) family influence, (10) media influence, (11) self-efficacy, and (12) government support. The main reason for choosing BRT is that BRT has more helpful for behavioral researchers who want study context specific factors of behavior, moreover BRT has better explanatory power than the pure TPB and TRA.

According to previous studies (e.g. Abd Rahman et al., 2015; Bang, Ellinger, Hadjimarcou, & Traichal, 2000; Barber et al., 2009; Hartmann & Apaolaza-Ibáñez, 2012; R. Kaynak & Ekşi, 2014; Y. Kim & Han, 2010; Michaelidou & Hassan, 2008; Pino et al., 2012; Putit & Johan, 2015; Tsai et al., 2015; Wu et al., 2013; Yadav & Pathak, 2016a; Zaimy Johana Johan, 2014) knowledge, health consciousness and environmental consciousness has an influence on intention through attitudes. Although much has been learned regarding the influence of knowledge, health consciousness and environmental consciousness on food, an understanding of whether knowledge, health consciousness and environmental consciousness influences attitude towards cosmetics in general and halal cosmetics in specific remains sparse. Hence, this study employed reasoning approach on global motive attitude that split attitude into three reasons (knowledge, health consciousness, and environment consciousness).

For better and comprehensive understanding of behavioral intentions, we should explore the impact of different communication channels such as family, friends, peers, mass media, word of mouth, and social media on behavioral intention (Md Husin, Ismail, et al., 2016; Mohammad G. Nejad et al., 2016; Zolait & Sulaiman, 2009). Past researchers on consumer behavior have found that there is a significant relationship between communication channels such as family and mass media on a number of consumption related variables (Khalek, 2014; Ng & Rahim, 2005; Nor & Pearson, 2008; N. F. Rahim et al., 2013; Rogers, 1995; Shih & Fang, 2004). Previous research regarding family and mass media has proven they have a positive influence on Muslims intentions towards halal products (Lada et al., 2009; Teng & Jamaliah, 2013). Hence, this study employed reasoning approach on

subjective norm that split subjective norms in to two reasons mainly family and mass media.

According to (Ajzen, 1985, 1991), Perceived behavior control refers “an individuals’ beliefs about their ability to perform a behavior”. The control beliefs are consist of internal factor i.e. self-efficacy (Bandura, 1991), and external factor i.e. resources facilitating conditions (Harry Charalambos Triandis, 1980). Westaby (2005a) suggested that researchers should consider perceived behavioral control reasoning approach if they are looking more explanatory power of intentions. Past researchers, not employed reasoning approach on PBC (global motive) in cosmetics domain in general and halal cosmetics domain in particular. To bridge, this literature gap, this study employed PBC reasoning approach that leads perceived behavioral control into two reasons such as internal factor (self-efficacy) and external factor (government support).

The current study modify or expands the pure BRT by integrate new construct (religiosity) which in consumer decision-making process play critical roles as shown in the past studies (e.g. Abd Rahman et al., 2015; Abou-Youssef et al., 2015; Ahlam Nuwairah Ahmad et al., 2015; Alam et al., 2012; El Ouafy & Chakir, 2015; Farrag & Hassan, 2015; Im, Bayus, & Mason, 2003; Jamaludin, 2013; Mukhtar & Mohsin Butt, 2012; Said et al., 2014; Souiden & Rani, 2015; Steenkamp, Hofstede, & Wedel, 1999). The inclusion of religion adds essential information concerning consumer behaviors towards halal products, which is not reflected in the original BRT.

Research Model

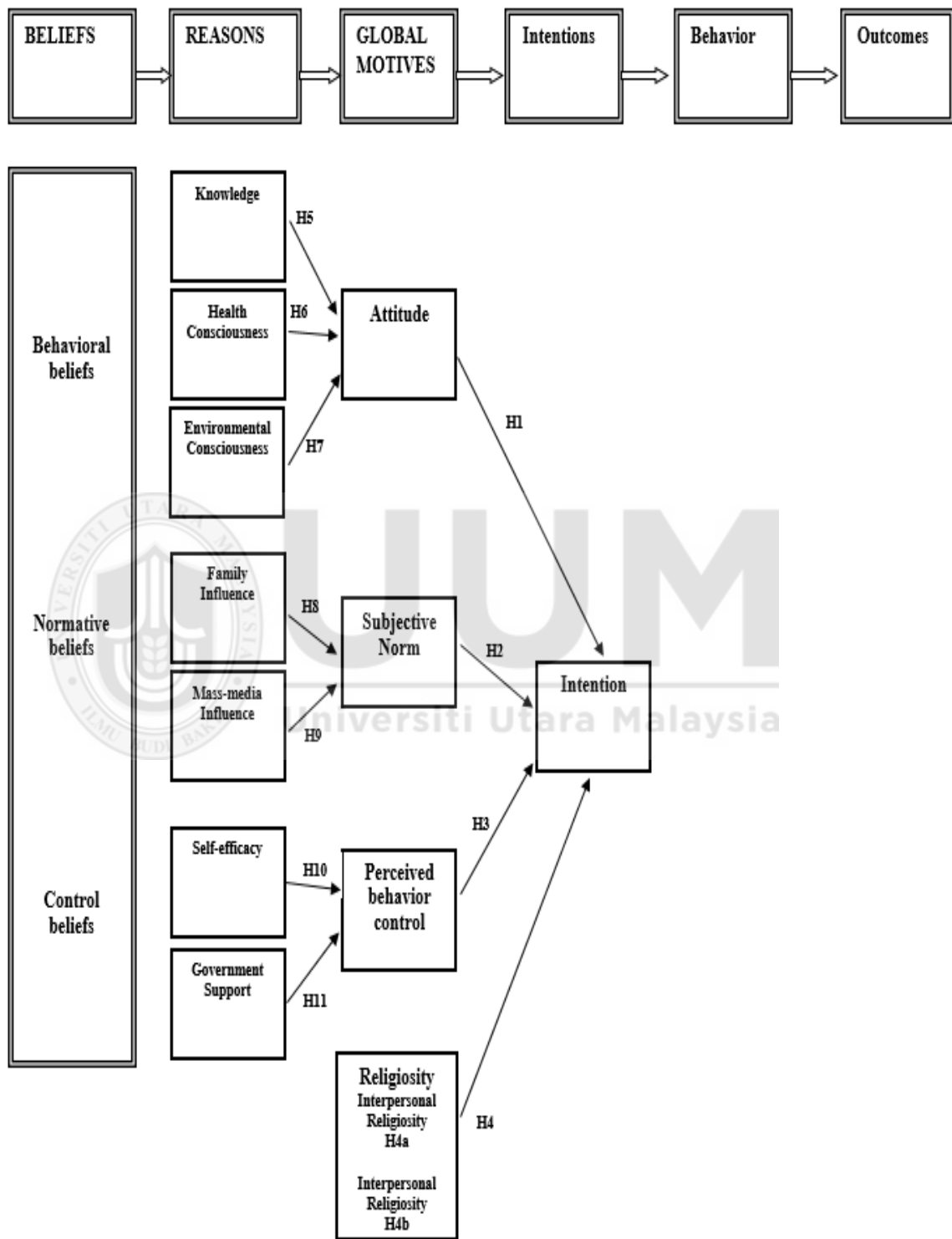


Figure 2.5
Research Model

2.10 Research Hypotheses Development

The hypothesis is conjectural statements of the relationship between two or more variables, which carry clear implications for testing the stated relations. A hypothesis is an unproven statement or proposition about a factor or phenomenon that is of interest to the researcher (Malhotra, Hall, Shaw, & Oppenheim, 2004). For the development of research hypotheses, the discussion and evaluation of the important concepts and studies in the halal domain in general and halal cosmetics in particular in the previous section are very useful. For that reason, for the formulation of research hypotheses of the current study, researcher take into account the findings of the previous studies. Research problem, research questions, and research objectives are also taken into account for the formulation of research hypotheses.

2.10.1 Attitude

The association between attitude and the intention to purchase halal cosmetics represents the first hypothesis. Ajzen (1991), define attitude in following words: *“The degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question”*. Attitude is constructed from certain beliefs, therefore these salient beliefs are the antecedent of attitude (Ajzen, 1991). Individual behavior that comes from attitude is a function of personal beliefs, according to Ajzen (1991) beliefs means *“the perceived consequences of the behavior and a person’s favorable attitude toward a specific behavior strengthens his/her desire to do the behavior”*. Positive or negative associations towards an object to determine the favorableness or unfavorableness of attitude towards that object (Ajzen & Fishbein, 2000). For example, in the current study, an individual has a favorable

or positive attitude towards halal cosmetics if they believe that they will bring positive consequences.

Previous consumer behavior researchers has been supported the relationship between attitude and intention to purchase halal products (Afendi et al., 2014; Amin, 2013; Fauziah, Taib, Ramayah, & Abdul Razak, 2008; Junos, 2012; Lada et al., 2009; Shah Alam & Mohamed Sayuti, 2011). The consumers' attitudes towards different halal products are not same (Hajipour, Gharache, Hamidizadeh, & Mohammadian, 2015). However, most of the prior studies were conduct in halal food or Islamic finance domain, and the relationship between attitude and halal cosmetic purchase intention has examined by few past studies (e.g. Amin, 2013; Amin et al., 2011; A. Aziz et al., 2013; Bonne et al., 2007; Shah Alam & Mohamed Sayuti, 2011). Therefore, this study is intent to fill this gap by examining customer's attitude towards halal cosmetics. It can be concluded from the above discussion that the attitude is a significant predictor of intention that leads individuals towards halal cosmetic buying behavior. Hence, the first hypothesis is developed as follows:

Hypothesis No: 1

Attitude positively and significantly affects the intention to purchase the halal cosmetics.

2.10.2 Subjective Norm

The association between subjective norm and the intention to purchase halal cosmetics represents the second hypothesis. Ajzen (1991) defined subjective norm as “the perceived social pressure to perform or not to perform the behavior” (Ajzen, 1991). Subjective norm is the strong predictor of individual's intention to purchase or not to purchase halal

cosmetics. Subjective norm is influenced by the degree of assessment or evaluation of important referents that would desire to purchase halal cosmetics or don't purchase it (A. Aziz et al., 2013).

Several previous consumer behavior researchers have examined the relationship between subjective norms on individual's intention to purchase cosmetics products (N. U. Ansari & Mohammed, 2015; A. Aziz et al., 2013; Yeon Kim & Chung, 2011). However, there is inconsistency in the results revealed in the previous studies in cosmetics settings; some of the previous studies found a significant relationship between subjective norm and intention to purchase cosmetics products (Bachleda et al., 2012; Kaur & Osman, 2014) while few studies found there is insignificant relationship (Kyung, 2012; Myers & Horswill, 2006). It can be seen from the review of literature in chapter three that subjective norm has positively and significantly affected an individual intention that leads individual towards halal products decision making. Hence, the following hypothesis is developed.

Hypothesis No: 2

Subjective norm positively and significantly affects the intention to purchase halal cosmetics.

2.10.3 Perceived behavior control

The third hypothesis in this study represents the relationship between perceived behavior control and purchase intention. According to (Ajzen, 1991) perceived behavior control is the significant predictor of individual's behavioral intention. Perceived behavioral control described as "the perceived ease or difficulty of performing the behavior or people's

perceptions of their ability to perform a given behavior” (Ajzen, 1991). Consumers considered halal cosmetic as a new product extension in the halal domain. Individuals are involved in certain behavior when the individual believe that they have essential resources and the confidence for performing a behavior. TPB postulates that person’s behavioral intention is affected by perceived behavior control (Ajzen, 1991).

Furthermore, prior consumer behavior researchers found that PBC has a considerable predictor of intention to purchase cosmetic products in general and halal cosmetic products in specific (A. Aziz et al., 2013; Kaur & Osman, 2014; Yeon Kim & Chung, 2011) while few studies found there is an insignificant relationship (N. U. Ansari & Mohammed, 2015; Nguyen, 2014). Although much has been learned regarding the association between perceived behavioral control and cosmetic products intention, an understanding of whether perceived behavior control influence generation Y intention towards halal cosmetics remains sparse. Based on the discussions in the past paragraph, the following hypothesis is proposed:

Hypothesis No: 3

Perceived behavioral control positively and significantly affects the intention to purchase halal cosmetics.

2.10.4 Religiosity

Definition of religion is “an organized system of beliefs, practices, rituals and symbols designed (a) to facilitate closeness to the sacred or transcendent (God, higher power, or ultimate truth/reality), and (b) to foster an understanding of one’s relation and

responsibility to others in living together in a community” (Harold G. Koenig, McCullough, & Larson, 2001). Religiosity can be defined as “the extent to which an individual is committed to his religion and to which that religion is reflected in the individual’s attitudes and behavior “(B. R. Johnson et al., 2001). Or we can say that religiosity is a measure of religiousness of persons (O'connell, 1975).

Previous consumer behavior researchers found that religion and religiosity have an impact on consumer intentions towards halal products (Alam et al., 2012; N. U. Ansari & Mohammed, 2015; Awan et al., 2015; El Ouafy & Chakir, 2015; Junos, 2012; Majid et al., 2015; Mukhtar & Mohsin Butt, 2012). Although much has been learned regarding the relationship between religiosity and consumer intentions towards halal food and Islamic finance (e.g Awan et al., 2015; El Ouafy & Chakir, 2015; Sun et al., 2012), an understanding of whether religiosity influence generation Y intentions towards halal cosmetics remains sparse. Furthermore, it was revealed by (Z. A. Ansari, 2014; Farrag & Hassan, 2015) that the impact of religion on consumption-related behavior has been considered very contemporary and raw topic, in addition, studied only minimally in marketing literature and among these few studies only focus Christianity and western culture. Based on the discussion in the above paragraph, the following hypothesis is proposed:

Hypothesis No: 4

H4a: Interpersonal religiosity positively affects the intention to purchase halal cosmetics.

H4b: Intrapersonal religiosity positively affects the intention to purchase halal cosmetics.

2.10.5 Knowledge

knowledge means “the expertise and skills acquired by a person or a group of people through a theoretical or practical understanding of a subject” (Radzi et al., 2011; Sinclair, 2015). Consumer behavior researcher found that knowledge has significantly influence on intentions through attitude (Bang et al., 2000; Shepherd & Towler, 1992; Zaimy Johana Johan, 2014), hence increasing knowledge will be likely to influence intention.

However, there are inconsistent findings produced in past studies. For example, some researchers point out that knowledge significantly influences Muslims consumer attitude towards halal products (Putit & Johan, 2015; Zaimy Johana Johan, 2014). In contrast, a study conducted by Abd Rahman et al. (2015) in Malaysia on the Muslims respondents over the age of eighteen years old found that knowledge has not significantly affect the attitude of Muslims towards intentions of halal products. In addition, an understanding of the relationship between knowledge and attitude of generation Y towards halal cosmetics remains scant. Therefore, to fill this gap this study intends to examine knowledge as an antecedent of consumers attitude towards halal cosmetics. In conclusion, the researcher has come out with the following hypothesis:

Hypothesis No: 5

Knowledge significantly and positively influences attitude.

2.10.6 Health consciousness

According to Leong and Paim (2015), health consciousness means “ the degree to which someone tends to care about their health”. Past studies found that health consciousness significantly influences consumer intentions through attitude (R. Kaynak & Ekşi, 2014; Michaelidou & Hassan, 2008; Yadav & Pathak, 2016a); hence increasing health consciousness will be likely to influence intention. In contrast (Pino et al., 2012; Tsai et

al., 2015) found that health consciousness does not significantly influence on intention through attitude.

Wiechers and Musee (2010) indicated that harmful cosmetic ingredients penetrate human skin, which causes skin damage. Health consciousness effect on consumer intentions towards food products has been much learned (e.g Leong & Paim, 2015; Paul & Rana, 2012; Pino et al., 2012; Salleh, Ali, Harun, Jalil, & Shahrudin, 2010; Shahrudin et al., 2010; Yadav & Pathak, 2016a). Moreover, health consciousness effect on generation Y intention through attitude towards cosmetic products in general and halal cosmetic, in particular, remains sparse (e.g A. Aziz et al., 2013; Tajeddini & Nikdavoodi, 2014). Therefore, to bridge knowledge gap this study intends to examine the relationship between health consciousness and attitude towards intentions to purchase halal cosmetics. Thus, this study hypothesizes this relationship as follows:

Hypothesis No: 6

Health consciousness significantly and positively influences attitude.

2.10.7 Environmental consciousness

Environmental consciousness means “showing a strong sense of environmental responsibility (i.e., supporting efforts to protect and preserve the environment as well as advising others to behave accordingly)”(Alsmadi, 2007). Many authors in the past acknowledged that environmental consciousness significantly influences consumer behavior (Hartmann & Apaolaza-Ibáñez, 2012; Karatu & Mat, 2015; Lasuin & Ching, 2014; O'Donovan & McCarthy, 2002; Paul & Rana, 2012; Wu et al., 2013). Furthermore, studies indicate that environmental consciousness effect consumers intention through

attitude (Hartmann & Apaolaza-Ibáñez, 2012; E. Kaynak, Kucukemiroglu, & Hyder, 2000). Contrariwise, the studies of (Khalek, 2014; Wu et al., 2013) suggested there is an insignificant relationship between environmental consciousness and consumer attitude. Wiechers and Musee (2010) pointed out that cosmetics products damage the aquatic environment and terrestrial environment. Additionally, much has been learned regarding the relation of environmental consciousness and consumer intentions in food domain (e.g Basha, 2014; Paul & Rana, 2012; Salleh et al., 2010), an understanding of the relationship between environmental consciousness and attitude of generation Y towards an intention to purchase cosmetic products remains scarce. Based on this, therefore, the following hypothesis is stated:

Hypothesis No: 7

Environmental consciousness significantly and positively influences attitude.

2.10.8 Family Influence

According to Ng and Rahim (2005), family influence means “the influence or pressure from sources known (family) to perform the behavior”. Numerous behavioral researchers consider family as one of the behavioral subjective norms that have an influence upon the individuals (Ng & Rahim, 2005; Shih & Fang, 2004; Taylor & Todd, 1995b). To predict intentions to choose halal products, Lada et al. (2009) found that family members are strong referent point and the subjective norm is predominately influenced by family members to predict intention to choose a halal product. In contract Khalek (2014) has conducted a study to identify factors that affect Muslim consumers attitude towards halal food outlets and halal certification found that family has not significantly influence Muslims consumers to

choose halal or non-halal food outlet. There are very limited studies which discuss the relationship of family and subjective norms in the halal territory in general and halal cosmetic in particular like (N. U. Ansari & Mohammed, 2015). Contrasting results and scarcity of literature regarding the relationship between family influence and subjective norms in halal cosmetic domain urge researcher to hypothesize this relationship as follows:

Hypothesis No: 8

Family influence significantly and positively influences subjective norm.

2.10.9 Mass media influence

Nor and Pearson (2008) defined mass media influence as: “the influence or pressure from the mass media to perform the behavior”. Chan (1998) points out that the mass media plays a vital role in influencing the client’s behavior in a positive or negative manner. In the world of today, the role of media became very influential on consumers (Swidi et al., 2010). Teng and Jamaliah (2013) have reported that mass media is the most important source of information of halal product particularly of halal cosmetics and personal care products. Most of the past studies conducted in different settings (Bhattacharjee, 2000; Ng & Rahim, 2005). However, the researcher hasn’t found any study in halal domain particularly in a halal cosmetic setting that included mass media as an antecedent of subjective norm. The conceptual positive relationship between mass media and subjective norm as shown in previous studies. Thus, this study hypothesizes a positive relationship as follows:

Hypothesis No: 9

Mass media influence significantly and positively influences subjective norm.

2.10.10 Self-Efficacy

Bandura (1986) define self-efficacy is “the confidence one feels about performing a particular behavior, including confidence in overcoming the barriers to achieving that behavior”. Numerous consumer behavior researchers found that self-efficacy significantly affect consumer’s intention through perceived behavioral control (Al-Majali & Nik Mat, 2010; Hsieh, 2015; Nor & Pearson, 2008; Shih & Fang, 2004). A study carried out by Tsai et al. (2015) indicate that self-efficacy does not affect intentions through perceived behavior control. In addition, there are limited studies that have been conducted in cosmetic setting or particular in halal cosmetic setting regarding the relationship between self-efficacy and perceived behavioral control. The conceptual relationship between self-efficacy and perceived behavior control is positive. To resolve this inconsistency and bridge this theoretical gap, the following hypothesis was developed:

Hypothesis No: 10

Self-efficacy positively and significantly influences perceived behavior control

2.10.11 Government Support

We defined government support as “the facilitation of the condition which translates into how available the resources which are needed for the behavior are to be carried out”(Harry C Triandis, 1979). Government support positively affects consumer intentions through perceived behavior control (Al-Majali & Nik Mat, 2010; M. Tan & Teo, 2000; Teo & Pok, 2003). Mauro C. Hernandez and Afonso Mazzon (2007) claimed that government support was an insignificant relationship towards intention through perceived behavior control. Government support has a positive impact on the health and development of halal

cosmetics, but there is a lack of government support for halal Islamic products (State of the Global Islamic Economy Report, 2014). However, the researcher hasn't found any study in the halal domain that included government support as an antecedent of perceived behavior control. This study intends to resolve inconsistency and minimize the gap in the literature regarding the relationship of government support and perceived behavior control. Thus, based on the above discussion, the researcher hypothesizes that:

Hypothesis No: 11

Government support significantly and positively influences perceived behavior control.

2.10.12 Religiosity effect

Finally, as already mention in the research question and research objective in chapter one, the present study tries to investigate whether religiosity explains additional variance in behavioral intention to purchase halal cosmetic products. Numerous past studies have suggested that religiosity play a significant in individual's intentions to purchase halal food and non-food products (e.g. Abd Rahman et al., 2015; Ahlam Nuwairah Ahmad et al., 2015; N. U. Ansari & Mohammed, 2015; Bonne, Vermeir, & Verbeke, 2008; Farrag & Hassan, 2015; Mukhtar & Mohsin Butt, 2012; Said et al., 2014). As mentioned previously, individuals who have a higher level of religiosity, more likelihood to have a higher level of intention to purchase halal products (i.e. halal cosmetic). This leads the researcher to propose the final hypothesis as flow:

Hypothesis No: 12

Religiosity explains additional variance in behavioral intention

2.10.13 Hypothesis Summary

The hypotheses of this study are formulated based on the research framework. Table 2.17 summarizes the hypotheses formulation as follows:

Table 2.17
Summary of the hypotheses

H: No	Hypotheses
H1	Attitude significantly and positively affects the intention to purchase the halal cosmetics
H2	Subjective norm positively affects the intention to purchase halal cosmetics.
H3	Perceived behavioral control positively affects the intention to purchase halal cosmetics.
H4a	Interpersonal religiosity positively affects the intention to purchase halal cosmetics.
H4b	Intrapersonal religiosity positively affects the intention to purchase halal cosmetics.
H5	Knowledge positively and significantly influences attitude.
H6	Health consciousness positively and significantly influences attitude.
H7	Environmental consciousness positively and significantly influences attitude.
H8	Family influence significantly and positively influences subjective norm.
H9	Mass media influence significantly and positively influences subjective norm.
H10	Self-efficacy positively and significantly influence perceived behavior control.
H11	Government support positively and significantly influences perceived behavior control.
H12	Religiosity explain additional variance in behavioral intention

2.11 Summary

This chapter provides some insight about halal cosmetics. Furthermore, this chapter gives brief detail about underpinning theories such as TRA, TPB and BRT. As well as it addresses the definition of halal cosmetic purchase intention and its antecedents, attitude and its antecedents, subjective norm and its antecedents, perceived behavioral control and its antecedents, religiosity and its measurements and it also explains the generation Y in relation to that study. Moreover, this chapter proposed a theoretical framework (a research model) based on behavioral reasoning theory (BRT). Twelve (12) research hypotheses were developed from the model: these hypotheses were developed from previous studies with the goal of examining the relationship between attitude, subjective norm, perceived behavioral control, religiosity and halal cosmetic purchase intention; knowledge, health consciousness, environmental consciousness, and attitude; family influence, mass media influence and subjective norm; self-efficacy, government support and perceived behavioral control.

CHAPTER THREE

METHODOLOGY

:

3.1 Introduction

This chapter is purposely to describe the research methodology used in this study. The sections that follow are devoted to describe the research design, population and sample of the study, operationalization of variables, variables measurement, questionnaire scale, questionnaire pre-test, pilot study, data collection method and the chapter ends with the discussion of data analysis strategy used for data analysis purposes.

3.2 Research design

Research design is a plan that details how data can be collected and analyzed with a view to resolving the research questions of the study (Saunders, Lewis, & Thornhill, 2009), it is defined as a blueprint for a study that specifies procedures to be followed by a researcher in order to achieve research objectives (Sekaran & Bougie, 2013). The research design is a plan for collecting the data needed to address research objectives. A typical research design defines the purpose of the study, the research strategy, the study's setting, the extent of researcher interference, the research time horizon, and the level at which the data will be analyzed (Saunders et al., 2009). Furthermore, the type of research design to be adopted depends on the purpose and nature of the study, whether it is exploratory, descriptive, or causal. Basically, there are three types of research design: exploratory research design, descriptive research design, and causal research design.

Exploratory research is conducted when too little or no information is available on how related problems are resolved in the past. It is undertaken when a researcher needs an in-depth knowledge in order to understand and address certain problems (Robson, 2002). Exploratory research involves the gathering of qualitative data through qualitative approaches. It often uses methods such as focus groups, interviews, or case studies. The findings or results of exploratory researchers are not generalizable to the whole population. It is less structured and flexible in nature (Saunders et al., 2009).

Descriptive studies are undertaken to describe phenomena. They are designed to collect data that describe the subjects being studied. It could be either quantitative or qualitative in nature. It involves the gathering of quantitative or qualitative data (Robson, 2002). Descriptive research design is considered appropriate when a researcher is interested in investigating relationships among variables to describe population or situations. Such studies are correlational in nature, as they describe the relationships that exist among variables. Descriptive researches could be cross-sectional or longitudinal. It is cross-sectional when data for the study are collected at one spot, and it is longitudinal when data for the study are collected at two or more times (Robson, 2002; Sekaran & Bougie, 2013).

Causal studies are undertaken to determine whether one variable causes another to change. In a causal study, the researcher is interested in delineating the factors that cause the problem. It is conducted to investigate the cause-and-effect relationship between variables, where one variable affects another (Saunders et al., 2009; Sekaran & Bougie, 2013).

3.2.1 Choice and Rationale of Research Design

As stated earlier, the choice of a research design is dependent on the purpose and nature of the study undertaken. This study is descriptive in nature. Therefore, a descriptive research design was adopted. First, a descriptive research design was adopted because the purpose of this study was to describe the nature of relationships that exists among attitude, subjective norm, perceived behavior control, religiosity i.e. interpersonal religiosity or intrapersonal religiosity, knowledge, environmental consciousness, health consciousness, family influence, mass media influence, self-efficacy, government support and purchase intentions of halal cosmetic in Pakistan. Second, this study was correlational in nature, and survey method (questionnaire) was used for data collection. Third, it was a cross-sectional study, as data for this study were collected at one shot. Fourth, probability sampling technique was adopted in order to make the findings of this study generalizable, and the unit of analysis was individual. Finally, the level of researcher's interference was minimal.

3.3 Population, Sample and sampling design of the study

3.3.1 Population of Study

The population is defined as the entire group of people or elements that the researcher wants to study (Sekaran & Bougie, 2013). An element is an individual member of the population. The population of this study consisted of 18645 students of all the 37 private medical and dental colleges which were recognized from (Pakistan medical & dental council, 2015) and are situated in Punjab as shown in Table 3.1. Students of the private medical and dental colleges which are situated in the province of Punjab are well suited for the purpose of this study due to following various reasons.

Chief Minister Punjab said Pakistan is a blessed country because more than 60 % population comprises of youth (Daily Times, 2015). Pakistan has second highest percentage of the youth population, after Yemen and a literacy rate of Pakistani youth is 79.1 % for males and 61.5 % for females (Mahar, 2014). According to (Pakistan demographic profile, 2014) median age of Pakistani population is 22.6 years, which is quite suitable for cosmetic usage.

Kyung (2012) indicate that the age range of university or college students is appropriate to investigate the cosmetics consumption related variables because they actively use cosmetics in this age group. Rezvani et al. (2013) stated that consumer who used cosmetic products on daily basis were educated enough to understand the questionnaire. Therefore, previous studies use college or university students to examine cosmetic consumption related variables (A. Aziz et al., 2013; Kyung, 2012; Majid et al., 2015; Rezvani et al., 2013; Teng & Jamaliah, 2013). Furthermore, Calder, Phillips, and Tybout (1981) suggested that in order to minimize the likelihood of random errors caused by heterogeneous samples, data should be collected from a homogenous group (for example, college or university students).

According to (Chen, 2009), non-conventional cosmetics (i.e. halal cosmetics, natural cosmetics, organic cosmetics) are always having higher prices as compare to conventional cosmetics (i.e. chemical base cosmetics). The findings of his study indicate that 87.1% informants insist on that the conventional cosmetic is cheaper than the non-conventional cosmetic. Private college or university students are more suitable because they have high

purchasing power as compare to public college or university students. There are four provinces namely, Baluchistan, Khyber Pakhtunkhwa, Punjab and Sindh in Pakistan. Punjab is Pakistan's largest province, both in terms of population and size of the economy (Bureau of Statistics Punjab, 2015). There are 87 recognized private medical and dental colleges in Pakistan from which 45 (more than 50%) private colleges are situated in Punjab. Moreover, these private medical and dental colleges are located in all over the province big cities (i.e. Lahore, Multan, Faisalabad, Sargodha, Sialkot) that represent well defined sample.

Table 3.1
Number of registered students in recognized private medical and dental colleges which are located in Punjab

No	College	Total number of students	Percentage of students	Number of samples required	Systematic random every sampling
1	FMH College of Medicine and Dentistry	919	5%	37	25 th
2	Foundation University Medical College	720	4%	30	24 th
3	Islamic International Medical College	474	2.5%	19	25 th
4	Lahore Medical and Dental College	1017	5.4%	40	25 th
5	Shifa College of Medicine, Islamabad	472	2.5%	19	25 th
6	Wah Medical College, Wah Cantt	473	2.5%	19	25 th
7	University Medical & Dental College, Faisalabad	889	4.8%	36	25 th
8	University College of Medicine & Dentistry, Lahore	998	5.3%	40	25 th
9	CMH Lahore Medical College, Lahore	723	3.9%	29	25 th
10	Islamabad Medical & Dental College	671	3.6%	27	25 th
11	Independent Medical College, Faisalabad	487	2.6%	19	26 th
12	Sharif Medical & Dental College, Lahore	670	3.6%	27	25 th
13	Continental Medical College, Lahore	232	1.2%	09	26 th
14	Akhtar Saeed Medical & Dental College, Lahore	688	3.7%	28	25 th
15	Central Parks Medical College, Lahore	482	2.6%	19	25 th

16	Multan Medical & Dental College, Multan	921	5%	37	25 th
17	Shalmar Medical & Dental College, Lahore	730	4%	30	24 th
18	Avicenna Medical College, Lahore	720	3.9%	29	25 th
19	Yusra Medical & Dental College, Islamabad	472	2.5%	19	25 th
20	Rashid Latif Medical College, Lahore	728	4%	30	24 th
21	Islam Medical College, Sialkot	468	2.5%	19	25 th
22	Amna Inayat Medical College, Sheikhupura	482	2.6%	19	25 th
23	Azra Naheed Medical College, Lahore	612	3.3%	25	24 th
24	Al-Nafees Medical College, Islamabad	385	2.0%	15	26 th
25	Pak Red Crescent Medical & Dental College, Lahore	270	1.4%	10	27 th
26	Aziz Fatima Medical & Dental College, Faisalabad	388	2.0%	15	26 th
27	Hashmat Medical & Dental College, Gujrat	260	1.4%	10	26 th
28	Rawal Institute of health Sciences, Islamabad	540	2.9%	22	25 th
29	Rai Medical College, Sargodha	282	1.5%	11	26 th
30	Rahber Medical and Dental College, Lahore	182	1%	07	26 th
31	Fazaia Medical College, Islamabad	96	0.5%	04	24 th
32	CMH Institute of Medical Science, Multan	90	0.5%	04	22 nd
33	Islamic International Dental College, Islamabad	280	1.5%	11	25 th
34	Margalla College of Dentistry, Rawalpindi	290	1.5%	11	26 th
35	Institute of Dentistry/CMH LMC, Lahore	190	1%	08	24 th
36	Islam Dental College, Sialkot	184	1%	08	23 rd
37	Faryal Dental College, Sheikhupura	160	1%	08	20 th
	Total	18645	100%	750	

3.3.2 Sample Size

A sample may be defined as a subset of the population (M. Kumar, Talib, & Ramayah, 2013; Sekaran & Bougie, 2013). The need to take a sample in a study becomes necessary for the following reasons. First, practically, it is not always possible to study the entire population of the study. Second, samples are taken because of the need to generalize research findings. The Population of this study consisted of 18645 students who are

registered in private medical and dental colleges which are located in Punjab. From Krejcie and Morgan (1970) population and sample size table, the ideal sample size for a population of 18645 is 375 as shown in Table 3.2. According to Mellahi and Harris (2016), response rates in business and management research in Pakistan/India region is 52.68%. So based on the findings of Mellahi and Harris (2016) that in past researches almost 50% of respondents returned the questionnaires, the number of questionnaires distributed in all Punjab private medical and dental colleges will be doubled to 750.

Table 3.2
Determining Sample Size of Given Population according to the Rule of Thumb (Krejcie & Morgan, 1970)

N	S
15000	375
20000	377
30000	379
40000	380
50000	381
75000	382
100000	384

N= population size, S= sample size Source:(Sekaran, 2006)

3.3.2.1 Sampling Design

Sampling is defined as the process of choosing an adequate number of elements from the population so that a study of the sample and an understanding of its characteristics make it possible to generalize such characteristics to the entire population (Saunders et al., 2009; Sekaran & Bougie, 2013). Majorly, there are two types of sampling design, namely probability (random) and non-probability (non-random) sampling. In a probability sampling, every element in the population has a chance of being selected while in a non-probability sampling, every element in the population does not have a chance of being

selected. However, the type of sampling design to adopt depends on factors such as the extent of generalizability desired, time and other resources required, and the purpose of the study (Robson, 2002; Saunders et al., 2009; Sekaran & Bougie, 2013).

Probability sampling can further be classified as simple random sampling, stratified sampling, systematic sampling, and area or cluster sampling (Saunders et al., 2009). In a simple random sampling, all elements of the population have an equal chance of being selected. It is good when the population is small and homogenous. The elements to be selected depend on the random numbers that are generated. It is easy to calculate when the sampling frame is small, but impracticable when the sampling frame is large. In a stratified sampling, the population is categorized into distinct groups called strata, and every element in a stratum has a chance of being selected. Each stratum is sampled as a subset of the entire population, and from each stratum, individual elements can be selected randomly. It allows for the adequate representation of various groups of interest, but it could be cumbersome stratifying the population into different strata. In a systematic sampling, the target population is serially listed, and elements of the population are selected at intervals. It allows for the selection of every n th element, which means the value of the n th element must be determined. It is determined by dividing the population by the sample size. The samples from systematic sampling are evenly spread over the target population, but all the elements do not have the same selection probabilities. In a cluster sampling, the population is divided into clusters, and samples are then selected from such clusters. It is different from stratified sampling. In a stratified sampling, a subset of the population within the

stratum is taken as the sample whereas, in a cluster sampling, a subset of clusters is taken as the primary sampling units (Saunders et al., 2009; Sekaran & Bougie, 2013).

Non-probability (non-random) sampling can also be divided into accidental (convenience) sampling, quota sampling, snowball sampling, and judgmental sampling (Sekaran & Bougie, 2013). In a convenience sampling, information is collected from the available population while in a quota sampling, all groups are represented in the study by assigning a quota based on identified features. Snowball sampling, on the other hand, is a situation where one respondent is used to generate names of other respondents. In a judgmental sampling, also called purposive sampling, elements or subjects are selected based on their ability to provide the information required (Saunders et al., 2009; Sekaran & Bougie, 2013).

For the purpose of easy generalizability, the present study has employed the systematic random sampling design. Systematic random sampling design is a method of sampling where each member of the population gets an equal chance of being chosen from a target population utilizing a particular method like Excel as the sample selection basis. A systematic sampling was adopted because it allowed for the spread of the samples over the target population (Saunders et al., 2009).

3.4 Operationalization and Measurement of Variables under Study

The operational definition refers to the questions (items) or dimensions that are employed in a study to measure the meaning of the construct (Burns & Bush, 2002; Hair, Bush, &

Ortinau, 2003). Operationalization of variables is about the measurement of research variables (Sekaran & Bougie, 2013). Through operationalization, research variables are reduced to constructs which can be observed and measured (Sekaran & Bougie, 2013). This study adopted/adapted 62 previously validated constructs to assist the operationalization of the variables of interest, including purchase intention, attitude, subjective norm, perceived behavioral control, religiosity i.e. interpersonal religiosity or intrapersonal religiosity, knowledge, health consciousness, environment consciousness, family influence, media influence, self-efficacy and government support. A summary of scale items is given below.

3.4.1 Behavioral Intentions

Behavioral intention is the main objective of this research, which can be termed as the factors of motivation which seek to capture how hard consumers are willing to buy halal cosmetic products in future or a measure of the strength of one's intention to perform a specified behavior (behavioral intention). In line with Ajzen (1991) who also opined that it is the most prominent predictor of behavior. This study measure behavioral intentions was measured by five items adopts from (Abd Rahman et al., 2015). It is measured on a seven- point Likert-type scale (1 = Strongly disagree; 2 = Disagree; 3 = Disagree somewhat; 4 = Neutral; 5 = Agree somewhat; 6 = Agree; 7 = Strongly agree).

3.4.2 Attitude

Consumer attitude in this study refers to “an individual's positive or negative feelings (evaluative affect) about performing the target behavior” (Ajzen, 1991). Consumers

attitude towards halal cosmetic products is measured by five items adapted from (Nor & Pearson, 2008). All items used to measure attitude construct in this study were measured using seven-point Likert-type scale (1 = Strongly disagree; 2 = Disagree; 3 = Disagree somewhat; 4 = Neutral; 5 = Agree somewhat; 6 = Agree; 7 = Strongly agree).

3.4.3 Subjective norm

Subjective norm is defined as “the person’s perception that most people who are important to him/her think he/she should or should not perform the behavior in question” (Ajzen, 1991). Subjective norm was measured by four items adapted from Nor and Pearson (2008). Each item is accompanied by a seven-point Likert scale (1 = Strongly disagree; 2 = Disagree; 3 = Disagree somewhat; 4 = Neutral; 5 = Agree somewhat; 6 = Agree; 7 = Strongly agree).

3.4.4 Perceived behavior control

In this study perceived behavior control refer to “an individual’s perception of the presence or absence of requisite resources or opportunities necessary for performing a specific behavior” (Ajzen, 1991). It is measured with a seven-point Likert scale format, ranging from (1 = Strongly disagree; 2 = Disagree; 3 = Disagree somewhat; 4 = Neutral; 5 = Agree somewhat; 6 = Agree; 7 = Strongly agree).

3.4.5 Religiosity

Religiosity can be defined as “the extent to which an individual is committed to his religion and to which that religion is reflected in the individual’s attitudes and behavior” (B. R.

Johnson et al., 2001). This study measure religiosity in term of intrapersonal religiosity “that originates from the beliefs and attitudes of an individual” and interpersonal religiosity “that develops from the involvement of an individual with a religious community or organization” (Benk et al., 2016). The items used to measure the construct are basically adopted from (Worthington Jr et al., 2003). Items for measuring religiosity related to intrapersonal religiosity and interpersonal religiosity consists of ten self-rating items on a seven-point Likert scale format, ranging from (1 = Strongly disagree; 2 = Disagree; 3 = Disagree somewhat; 4 = Neutral; 5 = Agree somewhat; 6 = Agree; 7 = Strongly agree).

3.4.6 Knowledge

Knowledge can be defined as awareness, consciousness or familiarity gained by experience or learning (Abd Rahman et al., 2015). Four items for this construct are adapted from the study of Nysveen and Pedersen (2005). Each item is accompanied by a seven-point Likert scale ranging from (1 = Strongly disagree; 2 = Disagree; 3 = Disagree somewhat; 4 = Neutral; 5 = Agree somewhat; 6 = Agree; 7 = Strongly agree).

3.4.7 Health consciousness

Health consciousness is the degree to which someone tends to care about their health (Leong & Paim, 2015). Health consciousness is measured with six items. Each item is accompanied by a seven-point Likert scale ranging from (1 = Strongly disagree; 2 = Disagree; 3 = Disagree somewhat disagree; 4 = Neutral; 5 = Agree somewhat; 6 = Agree; 7 = Strongly agree).

3.4.8 Environmental consciousness

Environmental consciousness refers both to a tendency to mentally reflect on the environment and on behavior and psychological states that reflect environmental commitment (Huang et al., 2014). It is measured with eight self-rating items on a seven-point Likert scale format, ranging from (1 = strongly disagree; to 7 = strongly agree).

3.4.9 Family influence

The study defined family influence as the influence or pressure from sources known as (family) to perform the behavior (Ng & Rahim, 2005). It is measured with a four self-rating items on a seven-point Likert scale format, ranging from (1 = Strongly disagree; 2 = Disagree; 3 = Disagree somewhat; 4 = Neutral; 5 = Agree somewhat; 6 = Agree; 7 = Strongly agree).

3.4.10 Media influence

Mass media influence is defined as “the influence or pressure from sources known as (TV, radio, and newspapers etc.) to perform the behavior” (Ng & Rahim, 2005). Media influence is measured with four items. Each item is accompanied by a seven-point Likert scale ranging from (1 = Strongly disagree; 2 = Disagree; 3 = Disagree somewhat; 4 = Neutral; 5 = Agree somewhat agree; 6 = Agree; 7 = Strongly agree).

3.4.11 Self-efficacy

Self-efficacy is defined as “an individual’s self-confidence in his or her ability to perform a behavior” (M. Tan & Teo, 2000). Self-efficacy is measured with five self-rating items on

a seven-point Likert scale format, ranging from (1 = strongly disagree; to 7 = strongly agree).

3.4.12 Government support

Government support refers to “the facilitation of the condition which translates into how available the resources which are needed for the behavior are to be carried out” (Harry C Triandis, 1979). In this study, government support is measured by using 4 items adapted from M. Tan and Teo (2000) & Yee-Loong Chong and Ooi (2008). They were gauged using a seven-point Likert scale (1 = Strongly disagree; 2 = Disagree; 3 = Disagree somewhat disagree; 4 = Neutral; 5 = Agree somewhat agree; 6 = Agree; 7 = Strongly agree).

3.5 Measurement

With the exception of demographic information, all other variables included in this study are measured using multiple items adapted from past studies. However, in order that they are fit for the current study, some changes in wording were made on these borrowed items. Table 3.3 summarizes the variables and the total number of items used to measure the each of the variables.

Table 3.3
Summary of Variables and Total Number of Items

Constructs	Number of items	Sources
Behavioral intention	5 items	Abd Rahman et al. (2015)
Attitude	5 items	Nor and Pearson (2008)
Subjective norm	4 items	Nor and Pearson (2008)
Perceived behavioral control	4 items	Shih and Fang (2004)
Intrapersonal religiosity	6 items	Worthington Jr et al. (2003)

Interpersonal religiosity	4 items	
Knowledge	4 items	Nysveen and Pedersen (2005)
Health consciousness	6 items	Michaelidou and Hassan (2008)
Environmental consciousness	8 items	Huang et al. (2014)
Family influence	4 items	A. S. Al-Ajam and Md Nor (2015)
Media influence	4 items	A. S. Al-Ajam and Md Nor (2015)
Self-efficacy	5 items	Christopher J Armitage and Conner (1999)
Government support	4 items	M. Tan and Teo (2000) & Yee-Loong Chong and Ooi (2008)

3.5.1 Behavioral intention

Behavioral intentions were measured by five items adopt from (Abd Rahman et al., 2015). The coefficient alpha of these instruments was 0.88. Each item is measured on a seven-point Likert scale. The items used to measure behavioral intention are given in Table 3.4 below.

Table 3.4
Behavioral intention measures (5 items)

No	Items	Alpha
1	I am willing to pay more for cosmetic products with an authentic halal logo.	$\alpha = 0.88$
2	I am willing to wait longer to buy cosmetic products with an authentic halal logo.	
3	I am willing to shop around to buy cosmetic products with an authentic halal logo.	
4	I am willing to travel long distances to buy cosmetic products with an authentic halal logo	
5	I intend to purchase halal cosmetic products in the future.	

3.5.2 Attitude

The attitude was measured by five items adapted from (Nor & Pearson, 2008) and these instruments have an alpha coefficient of 0.94. All items are measured on a seven-point Likert scale. The items used to measure behavioral intention are given in Table 3.5 below.

Table 3.5
Attitude measures (4 items)

No	Items	Alpha
1	Using halal cosmetic products is a good idea.	$\alpha = 0.94$
2	I like the idea of using halal cosmetic products.	
3	Using halal cosmetic products is a pleasant idea	
4	Using halal cosmetic products is an appealing idea.	

3.5.3 Subjective norm

Subjective norm was measured by four items adapted from Nor and Pearson (2008), these items have an alpha coefficient of 0.94. This measure contains four items, and all the items are measured using a seven-point Likert scale. The items for measuring subjective norm are shown in Table 3.6 below.

Table 3.6
Subjective norm measures (4 items)

No	Items	Alpha
1	People who are important to me think that I should use halal cosmetic products.	$\alpha = 0.94$
2	People whose opinions I value think I should use halal cosmetic products.	
3	People who are close to me think that I should use halal cosmetic products.	
4	People who influence my decisions think that I should use halal cosmetic products.	

3.5.4 Perceived behavioral control

Perceived behavior control was measured by four items adapted from Shih and Fang (2004), these instruments having an alpha coefficient of 0.86. All items are measured using a seven-point Likert scale. Table 3.7 below shows the items used to measure perceived behavioral control.

Table 3.7
Perceived behavioral control measures (4 items)

No	Items	Alpha
1	I would be able to purchase halal cosmetic products.	$\alpha = 0.86$
2	I have the resources to purchase halal cosmetic products.	
3	I have the knowledge to purchase the halal cosmetic products.	
4	I have the ability to purchase the halal cosmetic products.	

3.5.5 Religiosity

Religiosity was measured by 10 items adopted from (Worthington Jr et al., 2003). This scale is validated by numerous behavioral researchers (i.e Benk et al., 2016; Mokhlis, 2006; Mukhtar & Mohsin Butt, 2012). It's alpha coefficient is 0.68 for interpersonal religiosity and 0.87 for intrapersonal religiosity (Benk et al., 2016). All items are measured using a seven-point Likert scale. Table 3.8 below shows the items used to measure religiosity.

Table 3.8
Religiosity measures (10 items)

No	Items	Alpha
Interpersonal Religiosity		
1	I make financial contributions to my religious organization.	$\alpha=0.68$
2	I enjoy spending time with others of my religious affiliation.	
3	I keep well informed about my local religious group and have some influence in its decisions.	
4	I enjoy working in the activities of my religious organization.	
Intrapersonal Religiosity		
5	My religious beliefs lie behind my whole approach to life.	$\alpha=0.87$
6	I spend time trying to grow in understanding of my faith.	
7	It is important to me to spend periods of time in private religious thought and reflection.	
8	Religious beliefs influence all my dealings in life.	
9	Religion is especially important to me because it answers many questions about the meaning of life.	
10	I often read books and magazines about my faith.	

3.5.6 Knowledge

Knowledge was measured by five items adapted from (Abd Rahman et al., 2015). This scale consists of five items on a seven-point Likert scale and reliability coefficient for the scale is 0.76 as reported by (Abd Rahman et al., 2015). The items to measure the knowledge construct are shown in Table 3.9 below.

Table 3.9
Knowledge measures (4 items)

No	Items	Alpha
1	I feel very knowledgeable about halal cosmetic products.	
2	I have enough knowledge about halal cosmetic products to give others advice about it.	
3	Others often seek my advice on halal cosmetic products.	$\alpha = 0.76$
4	I feel very confident about what products are forbidden by Islam when buying halal cosmetic products.	

3.5.7 Health consciousness

Health consciousness was measured by six items adopted from Michaelidou and Hassan (2008). All items are measured using a seven-point Likert scale. Table 3.10 below shows the items used to measure health consciousness with a reliability coefficient of 0.89, as reported by Michaelidou and Hassan (2008).

Table 3.10
Health consciousness measures (6 items)

No	Items	Alpha
1	I reflect about my health a lot	
2	I am very self-conscious about my health.	
3	I am alert to changes in my health.	$\alpha = 0.89$
4	I am usually aware of my health.	
5	I take responsibility for the state of my health.	
6	I am aware of the state of my health as I go through the day.	

3.5.8 Environmental Consciousness

Environmental consciousness was measured by eight items adopted from Huang et al. (2014). This scale coefficient alpha is greater than 0.70. The items to measure the environmental consciousness construct are shown in Table 3.11 below.

Table 3.11
Environmental consciousness measures (8 items)

No	Items	Alpha
1	I feel frustrated and angry when I think of cosmetic industries that conduct business by polluting the environment.	
2	When two cosmetic products are similar, I tend to select the one that harms the environment less, even though it is more expensive.	
3	If the cosmetic products sold by the firms seriously damage the environment, I will refuse to purchase them.	$\alpha = <0.70$
4	When purchasing cosmetic products, I always select the ones with environmental certification, even though they are more expensive.	
5	I follow the key points of recycling and classify recycled waste at home.	
6	I often purchase products that are over-packaged.	
7	I am concerned about my actions to improve the environment.	
8	I am often concerned about and absorb environmental knowledge and information.	

3.5.9 Family influence

Family influence was measured by four items adapted from A. S. Al-Ajam and Md Nor (2015); it produced an alpha coefficient of 0.90. The items to measure the family influence construct are shown in Table 3.12 below.

Table 3.12
Family influence measures (4 items)

No	Items	Alpha
1	My family thinks that I should use halal cosmetic products.	
2	I will have to use halal cosmetic products if my family has already used it.	$\alpha = 0.86$
3	I have to use halal cosmetic products because my family thinks I should use it.	
4	Generally, I want to do what my family thinks I should do.	

3.5.10 Media influence

Mass media was measured by four items from (A. S. Al-Ajam & Md Nor, 2015). The coefficient alpha from the past study for this measure was 0.91. All items are measured using a seven-point Likert scale. Table 3.13 below shows the items used to measure media influence.

Table 3.13
Media influence measures (4 items)

No	Items	Alpha
1	The mass media suggest that I should use halal cosmetic products.	$\alpha = 0.86$
2	The mass media urge me to use halal cosmetic products.	
3	Mass media is full of reports, articles; TV, radio, newspapers, and internet suggest that I should use halal cosmetic products.	
4	Mass media and advertising consistently recommend that I should use halal cosmetic products.	

3.5.11 Self-efficacy

Self-efficacy was measured by five items adapted from Christopher J Armitage and Conner (1999). The alpha coefficient was 0.83. Self-efficacy items are measured using a seven-point Likert scale. Table 3.14 below shows the items used to measure self-efficacy.

Table 3.14
Self-efficacy measures (5 items)

No	Items	Alpha
1	Whether or not I purchase halal cosmetic products is entirely up to me.	$\alpha = 0.83$
2	I am confident that I can purchase halal cosmetic products regularly.	
3	I am very sure that I would be able to purchase halal cosmetic products next week.	
4	I am certain that I will be able to refrain myself from purchase cosmetic products that are not halal.	
5	If I wanted to, it would be very easy for me to purchase halal cosmetic products regularly.	

3.5.12 Government support

Government support was measured by four items adapted from (M. Tan & Teo, 2000; Yee-Loong Chong, Ooi, Lin, & Tan, 2010) and the alpha coefficient is 0.92 and 0.83. All items used to measure government support construct in this study were measured using a seven-point Likert scale. Table 3.15 below shows the items used to measure government support.

Table 3.15
Government support measures (4 items)

No	Items	Alpha
1	I think government endorses halal cosmetic products.	
2	I think government is active in setting up facilities to enable halal cosmetic products.	$\alpha = 0.92$
3	I think the government has good regulations laws and policies for halal cosmetic products.	$\alpha = 0.83$
4	I think government promotes the use of halal cosmetic products.	

3.6 Questionnaire Scale

In this study, common rating scales measuring latent construct in social science are used (Churchill Jr & Peter, 1984). The entire relevant constructs (independent and dependent variables) in the instrument are measured through a 7-point Likert-type scale, as used by researchers for collecting data (Salleh et al., 2010), with a degree of intensity provided for and expressed by consumer response. A direct response measure enables respondents' opinions (Luck & Rubin, 1987). Several prior studies were made using a 5-point Likert scale; other past studies used a 7-point Likert scale that provides a more detailed feedback without exposing the respondents to undue cognitive burdens. Hence, for this study a 7-point Likert scale was used, as it is also commonly used in marketing research and tested time and again in marketing and social science fields (L.-Y. Lin & Lu, 2010; Salleh et al., 2010; Wang, 2014; Wu et al., 2013). This study makes use of a 7-point Likert scale to

measure the study variables with (1) strongly disagree, (2) disagree, (3) disagree somewhat, (4) neutral, (5) agree somewhat, (6) agree, and finally, (7) strongly agree.

3.7 Questionnaire Pre-Test/Content Validity

In the research design, validity is used to determine the ability of an instrument in answer the questions scientifically. The validity is critical in research; it helps the researcher to determine the correct methods that truly measures the idea or constructs in the question. Thus, the instrument should be pre-tested and reviewed by a number of academicians and industrial practitioners to ensure and further enhance the content validity, readability, and brevity. There is no statistical analysis can be used to ensure the content validity, it can only determine by experts in the area (Flynn, Sakakibara, Schroeder, Bates, & Flynn, 1990). Since this study comprehensively adapted relevant questions from the previous study, content validity test is needed to test how well an instrument or scale to measure the particular concept.

A two steps practice was applied to develop and refine the survey questionnaire. Firstly, content or face validity is warranted by three academicians who have obtained a doctorate in the field of Marketing. Subsequently, face validity discussions with seven industrial practitioners were organized to obtain comments, suggestions, and improvement towards the developed instrument. Experts on the subject, including (Cavana, Delahaye, & Sekeran, 2001) and (Krejcie & Morgan, 1970), were unanimous on ten experts being enough for fine-tuning and verification of the content validity of a questionnaire. Based on this rule of thumb, the questionnaire for the present research was reviewed by each of the ten experts

for adequacy of understanding, face validity, comprehensibility, and measurement reliability. From the comments, the researcher has made amendments on the existing questionnaire to become the final version that can be distributed to the respondents.

3.8 Pilot Study

A pilot study is conducted by administering the study's questionnaire to a limited number of prospective respondents (Kumar et al., 2013; Sekaran & Bougie, 2013). It helps to ascertain whether the items (questions) in the questionnaire are properly worded and well understood by the prospective respondents (Kumar et al., 2013; Sekaran & Bougie, 2013). Also, it is conducted to help determine the reliability of the instruments for measuring research variables before taking the instruments to the field for full-scale data collection. The sample size of the pilot study group ranges from 25 or 50 subjects or from 25 to 100 subjects (W. Zikmund, 2003).

In order to ensure that the research instruments designed to measure the variables examined in this study passed the reliability test, the designed questionnaire was administered to 68 of the prospective respondents of private medical and dental college students. Thereafter, reliability scores (Cronbach's Alpha values) for the constructs were determined using SPSS Version 22. Table 3.16 shows the results of the pilot study conducted. Table 3.16 shows the constructs measured, the number of items measuring each construct, and the Cronbach's Alpha values extracted for the constructs.

Table 3.16
Pilot Study's Reliability Results

S/No	Constructs	No of items	Cronbach's Alpha
1	Purchase intention	5	.74
2	Attitude	4	.75
3	Subjective norm	4	.70
4	Perceived behavioral control	4	.79
5	Religiosity		
5a	Interpersonal religiosity	4	.70
5b	Intrapersonal religiosity	6	.76
6	Knowledge	4	.73
7	Health consciousness	6	.72
8	Environmental consciousness	8	.80
9	Family influence	4	.72
10	Mass media influence	4	.78
11	Self-efficacy	5	.78
12	Government support	4	.85

According to (Sekaran and Bougie (2013)) a Cronbach's Alpha value of .70 is acceptable. From Table 3.16, the Cronbach's Alpha values for all the constructs are fulfilled the recommended standard value of .70, which means all the constructs passed the reliability test.

3.9 Ethics in data collection

Basically, ethics in research were addressed while collecting data. As formerly noted, the respondents should be willing to share information in the survey if they have decided to participate (Blumberg, Cooper, & Schindler, 2011). Nobody should be forced to participate in the survey (Sekaran, 2003). This is to reflect the true objective during the process of answering the survey questions. Moreover, if the respondents agreed to participate, they have an obligation, to be honest, and truthful in the responses based on the best estimate

without any misrepresentation or untrue information (Sekaran & Bougie, 2013). Meanwhile, to protect respondent identity, the name of the respondent cannot be used and should only refer to the way of pseudonyms. Besides, the researcher should never conveniently ignore certain aspects of the data obtained (Bryman & Bell, 2007). In addition, all information provided by the respondent should be treated as strictly confidential and used for professional purposes and educational publications only. Thus, individuals should respect the confidentiality of the data obtained by the researcher. The request to disclose the response data or survey questionnaires are prohibited in research. The individuals should have an open mind in accepting the results and recommendations reported by the researchers in their study (Sekaran & Bougie, 2013).

3.10 Data collection method

Methods of data collection refer to the various ways through which data for a study can be obtained (Saunders et al., 2009; Sekaran & Bougie, 2013). The methods of data collection that the researcher uses depends on the type of research conducted, whether the study is qualitative or quantitative in nature (Sekaran & Bougie, 2010). The qualitative study uses methods such as interviews, observations, and focus groups. Generally, methods of data collection include interviews (whether face-to-face, telephone, or computer assisted), observations (with or without audio recording or videotaping), and questionnaires (whether administered personally, through the mail or electronically) (Sekaran & Bougie, 2013).

The interview is a method of data collection through which the researcher gathers information on variables or issues of interest. Interviews may be structured or unstructured.

It is a structured interview when there is a predesigned set of questions to be asked of the respondents. In an unstructured interview, there is no predesigned set of questions to be asked of the respondents. Interviews can be conducted face-to-face or personally, by telephone, or online. Generally, interviews, as a method of data collection, is useful mostly when exploratory research is undertaken, where an in-depth or rich information are needed for better understanding of the situations or problems under investigation. However, it is expensive and time-consuming (Saunders et al., 2009).

Observation is concerned with "the planned watching, recording, analysis, and interpretation of behavior, actions, or events". It is conducted in a natural setting, which may be controlled or uncontrolled setting. In observation, the researcher may and may not participate in the actions or events that are being observed. Observational method is good for a research that requires non-self-report descriptive data. It provides rich and uncontaminated data. Through the observational method, behavioral data can be gathered without asking questions. However, it is time-consuming and requires a specialized skill (Saunders et al., 2009; Sekaran & Bougie, 2013).

Another important method of data collection is a questionnaire. A questionnaire is a set of written predesigned questions with closely defined alternatives to which respondents record their answers (Saunders et al., 2009). Generally, questionnaires are designed to gather large numbers of quantitative data, and they are usually used in descriptive studies. Questionnaires can be administered personally, mailed to the respondents, or administered electronically. As a method of data collection, questionnaires are less expensive and do not

consume much time compared to interviews and observations. However, there may be a problem of low response rate (Saunders et al., 2009; Sekaran & Bougie, 2010).

In view of the data collection methods discussed above, this study used a questionnaire to collect data. The questionnaire was administered personally. Hence, a delivery and collection strategy of data collection was employed with the help of four research assistants. The researcher prepared this procedure due to its benefits. The first benefit is that the researcher can collect all the completed questionnaires quickly. The subsequent benefit is that the researcher can make clear on the spot the terms or parts of the questions that the respondents cannot understand, and thirdly, the researcher can encourage the participants to participate in the survey and give their views independently (Saunders et al., 2009; Sekaran & Bougie, 2013). Additionally, in an effort to get the questionnaire completed quickly as possible, the hand delivery and compilation method were selected which usually gives a better response rate. Moreover, hand delivery and collection are efficient in a society where the research culture is not well received like in Pakistan, where research culture is not fully developed (Jahangir, 2012). This is supported by Asika (1991) who discovered the response rate of mailed questionnaires is to be within a range of 3% - 4% only in developing countries like Nigeria where research culture is not fully developed.

3.11 Data analysis Strategy

The method of data analysis is the procedure and statistical tools by which researcher's analyses data, test research hypotheses and subsequently refine theories. In this study, descriptive and inferential statistics were employed to analyze the data. Descriptive

analysis was done using SPSS 20 which sought to explain the general understanding about the profiling, demography, etc. by summarizing the data and by offering various kinds of tabular presentations, and also it attempted to describe the data by showing the frequency of occurrence of various outcomes (Agresti & Finlay, 2009). Moreover, in descriptive statistics, the center of the data, as well as the variability of the data set, was presented and discussed to bring in more understanding of the issues.

On the other hand, there are two generations of analytical techniques employed in the inferential analysis to forecast and predict the dependent variable from the data (Fornell & Larcker, 1987). Earlier generation regression models such as LOGIT, MANOVA ANOVA, and linear regression, enable researchers to perform analyses for only one layer of linkages between research variables at a time. By contrast, the second generation of data analysis techniques, such as Structural Equation Modeling (SEM), enable high-quality statistical analysis. It allows researchers to answer interrelated research questions in a single and comprehensive analysis by modeling the relationships among research constructs simultaneously (Richard P Bagozzi & Yi, 2012; Fornell & Larcker, 1987; Kline & Guilford, 2016). Fornell and Larcker (1987) argued that SEM was developed as an alternative analytical technique which performs the functions that are similar to multiple regression but outweigh in some instances. Besides that, SEM is useful to examine a set of relationships among one or more dependent variables either continuous or discrete, stressed by (Hair, Black, Babin, & Anderson, 2010). Thus, the choosing of SEM as an analytical package in this study helped the researcher in analyzing multiple relationships between independent and dependent variables compare to other previously generation model, such

as linear regression, ANOVA, and MANOVA. The use of SEM is explained in detail in the subsequent section.

3.11.1 Structural Equation Modeling

Structural Equation Modeling has become one of the criteria to be considered during the selection of research methodologies, particularly in the study of issues that are connected to social and behavioral sciences (Baumgartner & Homburg, 1996; MacCallum & Austin, 2000). SEM process consists of two major components: validating the measurement model and fitting the structural model. It could be used to test different models of fit and to build up an overall model that best presents the data, and in turn advances the development of theory (Hair et al., 2010).

The basic goal of SEM is to describe the configuration of a chain of interlinked dependence interactions concurrently among latent or unobserved variables wherein each of them is measured by observed variables (Baumgartner & Homburg, 1996; Hair et al., 2010). Structural equation modeling (SEM) uses various types of models to depict relationships among observed variables, with the same basic goal of providing a quantitative test of a theoretical model hypothesized by the researcher (Hair et al., 2010). Usually, SEM is regarded as confirmatory instead of an exploratory technique. In addition to analyzing latent constructs, SEM also seeks to facilitate other kinds of investigations like variance and covariance estimation, linear regression, hypothesis testing, and confirmatory factor analysis (CFA) (Joreskog & Sorbom, 2001). For every construct, SEM is capable of measuring unidimensionality in addition to measuring the reliability and validity for the

same (Hair et al., 2010; Kline & Guilford, 2016). Moreover, it offers an overall assessment of the model 's fitness and simultaneous testing of the individual parameters, and that is how seeks to offer the most appropriate model fit for the data collected for the study. Moreover, there are two approaches to structural equation modeling: covariance-based SEM (CBSEM) and variance based SEM (VBSEM) (S. Davcik, 2014).

3.11.1.1 Covariance-Based Structural Equation Modeling (CB-SEM)

CB-SEM intends to analyze the difference between observed sample covariance matrix and algorithm estimated matrixes. It is to see whether the implied model fits the data (Afthanorhan, 2013; Hair, Ringle, & Sarstedt, 2011). In CB-SEM, the loadings are assigned to a particular construct before the estimation (Afthanorhan, 2013). CB-SEM assumes theoretical development of the model is strong (Afthanorhan, 2013; Hair et al., 2011; S. Davcik, 2014). Thus, it aims to “reproduce the observed data covariance matrix against an estimated covariance matrix” (Afthanorhan, 2013; Joreskog & Sorbom, 2001). In fact, it requires “relatively high-quality data and relatively strong developmental ideas” (Joreskog & Sorbom, 2001). Hence, several underlying assumptions are needed to performing this method. Firstly, the observed variables must be normally distributed and data observations have to be independent (Awang, 2012). The distributional problems often faced by complex models. However, there are estimators available to deal with non-normality (Bollen, 1989; Browne, 1984; Joreskog & Sorbom, 2001). Chin and Newsted (1999) noted that this technique often needs large sample sizes with the minimal range from 200 to 800 to be appropriate. These concerns are important in this study since there is constrained in sample size.

3.11.1.2 Partial Least Square Structural Equation Modeling (PLS-SEM)

Components based SEM such as PLS-SEM is rapidly becoming popular and a commonly used alternative to CB-SEM (Hair et al., 2011). PLS-SEM is alike to ordinary least squares or linear least squares regression, but being a components-based SEM technique (Afthanorhan, 2013; Hair et al., 2011). It comprises of two elements, which included measurement models i.e. outer model and structural model i.e. inner model (Hair et al., 2011). PLS-SEM is seen as a precursor to future CB-SEM analyses (Chin & Newsted, 1999). This is one of the reasons why the researchers select PLS-SEM.

However, there are many other reasons that PLS-SEM been selected (Lee, 2000). First, CB-SEM has a limitation in assessing complex models with sample size constraints (Chin & Newsted, 1999). However, PLS-SEM is considered has the capability in explaining complex models without sample size constraints (F. Hair Jr, Sarstedt, Hopkins, & G. Kuppelwieser, 2014). Moreover, PLS-SEM does not need normal distribution and it emphasized predictor specification or also known as nonparametric (F. Hair Jr et al., 2014; Hair et al., 2011). Besides, PLS-SEM able to cope with both reflective and formative measures (F. Hair Jr et al., 2014). In order to crystal clear the aforementioned discussion between CB-SEM and PLS-SEM, a comparison of CB-SEM and PLS-SEM is illustrated in Table 3.17 as follows. The comparison helped the researcher in deciding the approach to be chosen (Hair, Sarstedt, Ringle, & Mena, 2012). The next section provides justification for the selection of PLS path modeling.

Table 3.17
Comparison of CB-SEM/PLS-SEM

Criterion	PLS (Variance based SEM)	Covariance-based SEM
Objective	Prediction oriented	Parameter oriented
Approach	Variance	Covariance
Assumption	Nonparametric	Parametric
Implication	Optimal for prediction	Optimal for parameter estimation
Parameter estimates	Explicitly estimated	Indeterminate
Model complexity	Large complexity	Small to moderate complexity
Sample size	Minimum of 20-100	200-800

3.11.2 Justification for the Selection of PLS Path Modeling

In social science studies, data tend to have the problem of normality (Cain, Zhang, & Yuan, 2016; Osborne, 2010; Rowley, 2014) and PLS path modeling does not necessarily require normality of data because the technique treats non-normality relatively well (Wynne W. Chin, 1998). PLS-SEM is acceptable as analytical package in this study since it accepts the data that violates the assumption of normality which should be expected while dealing with data from the youth, unlike the CB-SEM that is very sensitive to the assumption of normality (F. Hair Jr et al., 2014; Hair et al., 2011; Hair et al., 2012). Furthermore, PLS-SEM relatively offers more clear and valid results, while other methods often lead to less clear conclusions and would require the researcher to undergo several separate analyses (Bollen, 1989).

Arguably, PLS path modeling provides more appropriate system for real world applications and is more advantageous to employ where models are complex, comprising of seven constructs and above (Hair et al., 2010) because of its soft modeling assumptions which give PLS its power of estimating large/complex models simultaneously (Akter, D'Ambra,

& Ray, 2011). This explains the PLS approach's popularity in marketing strategy and marketing management studies for the last two decades (Henseler, Ringle, & Sinkovics, 2009) because the technique is conducive for testing complex multivariate models, involving direct, indirect and interaction effects (F. Hair Jr et al., 2014; Hair, 2014). Although, PLS is traditionally associated with studies involving small sample size (Hair et al., 2011) the technique is also employed to make inferences about parameters in studies involving large samples (Starkweather, 2011). In fact, PLS technique can enhance prediction in studies involving large samples (Hair, 2014) similar to the current study.

In addition, PLS-SEM approach has gained increasing dissemination in a variety of disciplines such as accounting (Gonthier-Besacier, Hottegindre, & Fine-Falcy, 2016; L. Lee, Petter, Fayard, & Robinson, 2011), international marketing (Henseler et al., 2009; Rose, Clark, Samouel, & Hair, 2012), management information systems (Choudhury & Harrigan, 2014; Rapp, Trainor, & Agnihotri, 2010), marketing (Kassim & Ramayah, 2015; Okazaki & Taylor, 2008), strategic management (Klarner, Sarstedt, Hoeck, & Ringle, 2013; Lew, Sinkovics, & Kuivalainen, 2013), operations management (Peng & Lai, 2012) and supply chain management (Blome, Hollos, & Paulraj, 2014).

The current study examined relationships among thirteen variables (i.e. intention, attitude, subjective norm, perceived behavioral control, religiosity related to interpersonal religiosity and intrapersonal religiosity, knowledge, environmental consciousness, environment consciousness, family, media, self-efficacy and government support) within the structural model and thus, using PLS-SEM techniques was considered appropriate for

better prediction. Moreover, the focus of this study was on making a prediction which also gave rise to the need of using PLS (F. Hair Jr et al., 2014; Hair et al., 2011).

3.12 Summary

This chapter describes the methodology used in the study. Specifically, it describes the research approach, research design and population of the study, the unit of analysis, measurement, and operationalization of variables as well as sampling procedure. The chapter also reports the outcome of the pilot study conducted, the data collection procedure followed and the data analysis technique utilized.



CHAPTER FOUR:

FD FINDINGS

4.1 Introduction

This chapter discusses the data analysis and findings of the study in numerous sections to clearly present the results. A series of statistical analyses was applied on the collected data to accumulate information from the responded surveys. The statistical analysis starts by an overview of the data collected, in which the response rate is presented. The statistical analysis is followed by the demographic profile of respondents. Data screening is a must process to enable the further analyses conducted, which include analysis of non-response bias test, common method bias test, missing values, outliers, and fundamental statistical assumptions such as a test of normality. The analysis is followed by the descriptive statistics of the study variables and model's evaluations. The assessment of measurement model (i.e. internal consistency or reliability, construct validity, convergent validity, and discriminant validity) and structural model (i.e. main effects, effect size, predictive relevance, the goodness of fit) is to evaluate the overall model of the study. A summary of hypothesis testing is presented to simplify the results and findings of the study. Lastly, a chapter summary is provided at the end of this chapter as an overview of this chapter.

4.2 Analysis of survey response

4.2.1 Response rate

The data used for this research were collected from students of all the 37 private medical and dental colleges which were recognized from (Pakistan medical & dental council, 2015) and are situated in the province of Punjab. The total number of 750 questionnaires was distributed to the

respondents. In addition to the personal administration of the questionnaires, an incentive in the form of a pen was given to the respondents in order to attract a high response rate. Thus, it was expected that the approach adopted in this research would most likely facilitate a high response rate. Eventually, the strategy employed actually played an important role in generating a high response rate in the research (Babbie, 2011; Baker, Singleton, & Veit, 2011; Sekaran & Bougie, 2010).

Furthermore, 573 questionnaires were returned out of 750 questionnaires that were distributed to the participants which make the response rate to be 76.40%. Besides that, only 542 questionnaires were useful for further analysis out of 573 returned questionnaires, making the valid response rate to be 72.26%. This is because out of the 573 questionnaires collected, 31 were discovered to be wrongly filled or incomplete as several missing data per case has been observed. So they were rejected for further analysis.

Researchers like Hair et al. (2010) and Sekaran (2003) have recommended the response rate of 30% for the survey as fits for analysis. Thus, the valid response rate of 72.26% is good and acceptable to achieve the objective of this study, as shown in Table 4.1. Indeed, Pallant (2011) stresses that for the analysis that has to do with the interrelationship of variables; the sample size should be ten times of the independent variables of the model under study. Accordingly, a sample of 130 is adequate for analysis in this study given that the number of variables in the current study is thirteen. In fact, the 542 usable questionnaires fulfill the requirements of finding the relationship between the constructs in the research model. Therefore, the gathered questionnaires are adequate for conducting further analysis in this study.

Table 4.1
Response Rate of the Questionnaires

Response	Frequency/Rate
Number of questionnaires distributed	750
Number of returned questionnaires	573
Number of returned/usable questionnaire	542
Number of excluded questionnaires	31
Questionnaires not returned	177
Response rate	76.40%
Valid response rate	72.26%

4.2.2 Tests of Non- Response Bias

According to Sax, Gilmartin, and Bryant (2003), non-response bias refers to the prejudice that occurs when respondents' responses to the survey are different from those who did not respond due to diverse demographic factors such as (gender, age, etc.). In this case, Armstrong and Overton (1977) have argued that the respondents who respond late had similar characteristics to non-respondents. If the two groups did not differ in their responses, it is assumed that the non-response bias exists. Then, to determine whether a non-response bias exists, Pallant (2011) stated that the independent samples t-test can be used to test whether it is a non-response through comparison between the early and late responses. In this study, the researcher made use of the independent samples t-test to find out whether or not there was a statistically significant difference between the mean scores of the two groups of respondents. Based on the response time (early and late response) discussed above, 414 respondents were classified as early responses and 128 respondents as late responses.

An independent sample t-test was then conducted for all variables such as purchase intention, attitude, subjective norm, perceived behavioral control, interpersonal religiosity, intrapersonal religiosity, knowledge, health consciousness, environmental consciousness, family influence, mass media influence, self-efficacy and government support to find out if there is any bias among the groups. Levene's test for equality of variance was used to know whether the variances between the early and late respondents differ. According to Field (2009) and Pallant (2011), the threshold for Levene's test of significance for the equality of variances should be a value greater than 0.05.

Table 4.2
Result of the Independent-Samples T-test for Non-Response Bias

Variables	Groups	N	Mean	Std. Deviation	Std. Error Mean	F	Levene's Test for Equality of variances
							Sig
KN	Early Response	414	4.95	1.185	.058	.061	.805
	Late Response	128	5.43	1.267	.112		
HC	Early Response	414	5.34	1.007	.049	.176	.675
	Late Response	128	5.76	1.023	.090		
EC	Early Response	414	4.14	.932	.046	.405	.525
	Late Response	128	4.80	.991	.088		
FI	Early Response	414	4.31	1.024	.050	.139	.709
	Late Response	128	4.78	1.075	.095		
MI	Early Response	414	4.75	.999	.049	.241	.623
	Late Response	128	5.14	.963	.085		
SE	Early Response	414	4.38	.957	.047	.001	.973
	Late Response	128	4.81	.981	.087		
GS	Early Response	414	5.14	.941	.046	1.878	.171
	Late Response	128	5.30	.872	.077		
ATT	Early Response	414	4.57	1.021	.050	.073	.788

	Late Response	128	5.04	1.055	.093		
SN	Early Response	414	4.07	1.272	.063	3.226	.073
	Late Response	128	4.77	1.140	.101		
PBC	Early Response	414	5.60	.891	.044	.107	.744
	Late Response	128	5.73	.897	.079		
InterR	Early Response	414	4.77	1.069	.053	.167	.683
	Late Response	128	5.21	1.109	.098		
IntraR	Early Response	414	4.24	1.072	.053	.713	.399
	Late Response	128	4.78	1.030	.091		
PI	Early Response	414	4.90	1.153	.057	1.544	.215
	Late Response	128	5.37	1.112	.098		

From table 4.2 above, the results of the independent-samples t-test demonstrate that the equal variance significance values for each of the seven main study constructs were above the 0.05 significance level. Thus, the assumption of equality of variance between the early and late respondents has not been violated. Furthermore, the present study has attained a 76.40 % response rate which is quite above the 50 % minimum response rate suggested by (Salkind, 1997) for the absence of non-response bias. Therefore, this study seeks to conclude that there is no non-response bias capable of affecting the ability of this research to generalize its findings. Thus, the foregoing result has given this study the opportunity to utilize the entire 542 responses in the data analysis.

4.2.3 Test of Common Method Bias

Another potential issue in statistical analysis is common method bias also known as common method variance (CMV). CMV is the “variance that is attributable to the measurement method rather than to the constructs the measures represent” (Podsakoff, MacKenzie, Lee, & Podsakoff,

2003). This also can be understood as systematic measurement errors. The current study employed a number of procedural methods to reduce the effect of CMV. These steps include the elimination of ambiguity in the wording of indicators and making them clear and concise and informing respondents that the answers they provide through the questionnaire shall remain confidential (MacKenzie & Podsakoff, 2012). In addition, the present study adopted Harman's one-factor test, to address the issue of common method bias. The results showed that no single factor accounted for most of the variance in the variables. The first factor accounted for only 22.193 percent of the variance. Hence, common method bias is not a significant issue in this study.

4.3 Data Screening and Preliminary Analysis

4.3.1 Missing Values

The most important phase in the data screening stage is the missing data test, which identifies missing data. Data is often incomplete, owing to the various phases involved in the completion of the questionnaire. Respondents often refuse to reply to personal questions such as their income and age among others. In addition, some respondents leave questions unanswered owing to their ignorance concerning the topic. Missing data as established in prior studies can be for this reason (Kline, 1998). Besides deleting them, the researcher may also replace them with the mean value in case the missing data is not over 5% of the total data required (Hair et al., 2010). Various studies have proven that missing data is an issue of major concern to many researchers, and has the capability of negatively affecting the results of empirical research (Cavana et al., 2001). Treatment of missing data is very crucial in the analysis, using Smart PLS as one of the statistical instruments for analysis. The data will not run if there are any missing values (Hair et al., 2010). Alternatively, SPSS can be used as the general treatment of missing data by replacing missing values with a mean

or median of nearby points or via linear interpolation. However, the Case Processing Summary in Table 4.3 shows that all data of the study are complete and no missing data detected.

Table 4.3
Case processing summary

Variables	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
KN	542	100.0%	0	0.0%	542	100.0%
HC	542	100.0%	0	0.0%	542	100.0%
EC	542	100.0%	0	0.0%	542	100.0%
FI	542	100.0%	0	0.0%	542	100.0%
MI	542	100.0%	0	0.0%	542	100.0%
SE	542	100.0%	0	0.0%	542	100.0%
GS	542	100.0%	0	0.0%	542	100.0%
ATT	542	100.0%	0	0.0%	542	100.0%
SN	542	100.0%	0	0.0%	542	100.0%
PBC	542	100.0%	0	0.0%	542	100.0%
InterR	542	100.0%	0	0.0%	542	100.0%
IntraR	542	100.0%	0	0.0%	542	100.0%
PI	542	100.0%	0	0.0%	542	100.0%

4.3.2 Assessment of Outliers

Assessment of outliers is a vital stage in data screening and data preparation for analysis and regarded as a determinant of results and strength of the predictive power of research model (Aguinis, Gottfredson, & Joo, 2013; Montgomery, Peck, & Vining, 2012). Evidence from the statistics has shown that outliers are any observation or measures that are numerically distance from other observations either smaller or larger (Byrne, 2010; Cousineau & Chartier, 2010). In

order words, outliers should be regarded as the extreme case scores that may probably affect the result of the analysis, either too high, too low or having a unique combination of values of several variables (Hair et al., 2010).

Barnett and Lewis (1994) defined outliers as observations or subsets of observations which appear to be inconsistent with the remainder of the data. In a regression-based analysis, outliers are capable of leading to unreliable results by significantly distorting the estimates of regression coefficients in the data set (Verardi & Croux, 2009). To detect observations which were outside the expected range, Mahalanobis D2 were employed to detect multivariate outliers (Tabachnick & Fidell, 2007). Using this procedure, 13 multivariate outliers were detected and excluded from the analysis, leaving a final data set of 529.

4.3.3 Test of Normality

The assumption of a normal distribution is regarded as important for many of the statistical tests and structural equation modeling (Hair et al., 2010). Hair (2014) argued that normality enhances the shape of the data distribution for an individual metric variable and its correspondence to the normal distribution which is the benchmark for statistical methods. Moreover, Cain et al. (2016) emphasized that normality of the data to be used for the analysis can be determined through the assessment of univariate and multivariate skewness and kurtosis. This study performs the univariate and multivariate normality test for measuring normality of the data by using a web application (Cain et al., 2016). The univariate and multivariate normality test confirmed the nonnormality of the data. Hence, the non-normality of the collected data in this study calls for the

usage of PLS-SEM for the data analysis as PLS-SEM takes care of the standard error that may cause the non-normality of the distribution (Hair, 2014; Hair et al., 2011).

4.3.4 Multicollinearity

Multicollinearity refers to a problem that occurs when the independent variable is highly correlated with other independent variables within a correlation matrix. The problem leads to a complexity within to determine the specific contribution of each independent variable that predicts the dependent variable (Hair et al., 2010; Sekaran & Bougie, 2010). As strongly recommended by Hair et al. (2010), multicollinearity assumptions among independent and dependent variables are necessary before performing the hypotheses testing of the model. As generally agreed, the multicollinearity assumptions can be accomplished through testing the Tolerance value and Variance Inflation Factor (VIF) value (Pallant, 2011). The tolerance value is the indicator of determining the dependent variable prediction by other independent variables in the regression variate, while VIF is an indicator of the other independent variables that have an impact on the standard error of a regression coefficient. It is Tolerance inverse (Hair et al., 2010). Multicollinearity exists when the results show Tolerance values below or equal 0.10 and VIF values higher or equal 10 (Hair et al., 2010; Sekaran & Bougie, 2010). Table 4.4 below presents the results of the multicollinearity test using SPSS v22.

Table 4.4
Multicollinearity Test based on Tolerance and VIF Values

Independent Variables	Collinearity Statistics	
	Tolerance	VIF
Knowledge	.513	1.948
Health Consciousness	.451	2.217

Environmental Consciousness	.565	1.769
Family Influence	.614	1.627
Media Influence	.543	1.842
Self-Efficacy	.778	1.286
Government Support	.626	1.598
Attitude	.542	1.845
Subjective Norm	.641	1.561
Perceived Behavioral Control	.729	1.373
Interpersonal Religiosity	.472	2.118
Intrapersonal Religiosity	.460	2.175

4.4 Demographic Profiles of the Respondents

Table 4.5. demonstrates the demographic profiles of the respondent's in the sample. The demographic features examined in the current study are gender, age, material status, a program of study, resident place, monthly income, monthly spending on cosmetic products and frequency of purchasing cosmetic products.

Table 4.5
Demographic profiles of the respondents

Demographic Variable	Frequency	Percentage
Gender		
Male	373	68.80
Female	169	31.20
Age		
18-24 years	409	75.50
25-30 years	81	14.90
31-36 years	52	9.60
37- and older		
Material Status		
Single	313	57.70

In relationships	154	28.40
Married	75	13.80
Education		
MBBS	379	69.90
BDS	163	30.10
Resident Place		
Urban	431	79.50
Rural	111	20.50
Monthly cosmetic spending		
Less than 1500 Rs	31	5.70
1500 - less 3000	116	21.40
3000 - less 4500	274	50.60
4500 Rs and over	121	22.30
Frequency of buying cosmetic product		
Once a month	34	6.30
Twice a month	311	57.40
Three times a month	163	30.10
More than three times a month	34	6.30

Based on the result, the majority of the respondents were from the age group of 18-24 years' old which consisted of 75.50% of them, which was then followed by 14.90% of them were 25-30 years old, the remaining 9.60 were from the age group of 31-36 years old. The demographic profile indicated that out of 542, 57.70% of them are single followed by 28.40% of them were in a relationship and the remaining 13.80% of the respondents were married. Besides, the majority of the respondents are enrolled in MBBS program which consisted of 69.90% while 30.10% of the respondents are enrolled in BDS program. 79.50% respondents were lived in urban areas and remaining 20.50% has a residential place in rural areas.

Furthermore, 5.70% of the respondent are spent less than Rs 1500 monthly on cosmetic products, followed by 21.40% of them spend Rs 1500 or less than Rs 3000 per month on a cosmetic product. In addition, 50.60% respondents of them spend Rs 3000 or less than Rs 4500 monthly on cosmetic product and 22.30% of them spend more than Rs 4500 and over per month on a cosmetic product. Additionally, 6.30% of the respondents purchased the cosmetic product once a month, which was then followed by 57.40% of them were purchased cosmetic product twice a month. Meanwhile, 30.10% of them were purchased cosmetic product three times a month and the remaining 6.30% of them were purchased a cosmetic product more than three times a month.

4.5 Descriptive Analysis

A descriptive analysis was performed in this study primarily to summarize and explain the main features of the data set from the standpoint of survey respondents on every variable/dimensions considered in the study. It was conducted mainly due to the fact that the descriptive statistics of dimensions explained through mean, standard deviation; variance, etc. collectively seeks to offer a researcher a general view regarding how the survey respondents have responded to the survey instrument used in the study (Sekaran & Bougie, 2010).

Table 4.6. shows that subjective norm (SN) has the lowest mean of (4.24), while the highest mean is perceived behavioral control (PBC) with (5.66). Moreover, the standard deviation for all variables seems to fall between the ranges of .864 to 1.273, which reflects the existence of considerable acceptable variability within the dataset. Range of scale is between 1 to 7, with N =529

Table 4.6
Descriptive Statistics of Latent Variables

Variable	No. of Items	N	Mean	Std. Deviation	Minimum	Maximum
Knowledge	4	529	5.07	1.215	1	7
Health Consciousness	6	529	5.44	1.021	1	7
Environmental Consciousness	8	529	4.30	.981	1	7
Family Influence	4	529	4.42	1.059	1	7
Media Influence	4	529	4.86	1.003	1	7
Self-Efficacy	5	529	4.48	.983	1	7
Government Support	4	529	5.19	.925	1	7
Attitude	4	529	4.68	1.048	1	7
Subjective Norm	4	529	4.24	1.273	1	7
Perceived Behavioral Control	4	529	5.66	.864	1	7
Interpersonal Religiosity	4	529	4.89	1.083	1	7
Intrapersonal Religiosity	6	529	4.37	1.086	1	7
Purchase Intention	5	529	5.02	1.156	1	7

4.6 Assessment of Measurement Model

The assessment of PLS-SEM obeys the two steps approaches that involve measurement model (outer model) and structural model assessments (inner model) (Hair et al., 2011; Henseler et al., 2009; Ringle, Boysen, Wende, & Will, 2006; Wilson, 2010). The first step in the evaluation of model in PLS-SEM is the assessment of measurement model which pays attention to the reliability and validity of measures that form each of the constructs (Esposito Vinzi, 2010; Hair, 2014; Wilson, 2010). Researchers have stressed that the main activities in the assessment of measurement model deal with indicator reliability, internal consistency reliability, convergent validity and discriminant validity (Esposito Vinzi, 2010; Hair, 2014; Hair et al., 2010; Hair et al., 2011).

Moreover, the reliability of the indicators which is known as the indicator loadings become acceptable with the loading of 0.4 and above (Hair et al., 2011). The internal consistency reliability of the measurement can be verified by using composite reliability which should be higher than the threshold of 0.7 as the acceptable value.

In addition, the validity phase of measurement assessment of PLS-SEM model focuses on the convergent validity and the discriminant validity (Esposito Vinzi, 2010; Hair, 2014; Hair et al., 2011). Convergent validity is the evidence of showing that interested measure is related to the rest of the shared measures in the constructs (Petter & McLean, 2009). In other words, Petter and McLean (2009), Dmitrienko, Chuang-Stein, and D'Agostino (2007) argued that convergent validity is the evidence of establishing an efficient relationship between scales that are under review and the validated scales believed to measure the constructs). Meanwhile, Hair et al. (2011), Esposito Vinzi (2010) and Fornell and Larcker (1981) stressed that Average Variance Extracted (AVE) should be used for measuring the convergent validity of the constructs with its standard threshold value which should be higher than 0.50. Indeed, an AVE value of 0.50 represents that 50% or more variance of the indicators should be accounted for (Esposito Vinzi, 2010; Henseler et al., 2009). The importance of AVE in the validity phase of measurement model in PLS-SEM helps in determining the constructs indicator that could be used for the model fitness. Therefore, there is a need to set the PLS windows parameters before deleting the items/ factors that are not feet for the model's variance explanation (Esposito Vinzi, 2010; Hair, 2014).

Lastly, the discriminant validity as the second phase of validating the measurement model examines how each item relates to each construct and how strongly is the measured construct relate

to the construct it intends to reflect (Hair, 2014; Hair et al., 2011). However, previous studies have argued that the measured construct must not have a strong connection with another construct in the model in order to commit the discriminant validity problem (Esposito Vinzi, 2010; Wilson, 2010). Therefore, the discriminant validity can be verified by comparing the square of AVE to the rest of loadings in each construct with the expectation of square of AVE to be higher (Esposito Vinzi, 2010; Hair, 2014). Besides that, researchers like Hair (2014), Hair et al. (2011), Esposito Vinzi (2010), Wilson (2010) have argued that discriminant validity can be further verified by ensuring that the indicator or item loadings are higher than all of its cross loadings. Hence, the threshold values for assessing the measurement model (outer model) (Richard P Bagozzi & Yi, 1988; Esposito Vinzi, 2010; Hair et al., 2010; Henseler, Ringle, & Sarstedt, 2015; Henseler et al., 2009) are duly followed in this study as shown in the Table 4.7

Table 4.7
Measures and Threshold Values for Assessment of Measurement Model

Assessment Subject	Measures	Threshold values
Indicator Reliability	Factor Loadings	>0.4
Internal Consistency Reliability	Composite Reliability	>0.7
Convergent Validity	Average Variance Extracted (AVE)	>0.5
Discriminant Validity	Fornell-Larcker Criterion	The square root of the AVE of each construct should be higher than its highest correlation with any other construct.
Discriminant Validity	Heterotrait-Monotrait Ratio (HTMT)	Thresholds of 0.85 and 0.9 for HTMT to establish discriminant validity

4.6.1 Individual Items Reliability or indicator reliability

In the present study, individual item reliability or indicator reliability was measured by assessing the outer loadings of each construct measure consistent with the PLS-SEM procedure (Duarte & Raposo, 2010; Hair, 2014; Hulland, 1999). Conventionally, the value for individual item loading should be greater than 0.70 (Hair et al., 2011), however, Hulland (1999) offered a cut-off point of 0.4; that any indicator with outer loading less than 0.4 should be removed from the measurement model. Similarly, Hair (2014) posited that “indicators with outer loadings between 0.40 and 0.70 should be considered for removal from the scale only when deleting the indicator leads to an increase in the composite reliability or the average variance extracted above the suggested threshold value”. A total 11 indicators (ATT4, EC5, EC6, FI4, GS1, GS2, HC1, Intra3, MI4, PBC4, SE1) were deleted which consisted of poor loadings as per aforesaid criteria. Thus, 51 items were retained in the model as they had loadings between 0.558 and 0.913 as shown in table 4.8. and Figure 4.1.

Table 4.8
Outer factor loadings values

	ATT	EC	FI	GS	HC	InterR	IntraR	KN	MI	PBC	PI	SE	SN
ATT1	0.870												
ATT2	0.858												
ATT3	0.805												
EC1		0.685											
EC2		0.758											
EC3		0.704											
EC4		0.733											
EC7		0.664											
EC8		0.740											
FI1			0.836										
FI2			0.817										
FI3			0.751										
GS3				0.902									
GS4				0.859									
HC2					0.700								

HC3	0.689		
HC4	0.697		
HC5	0.726		
HC6	0.796		
InterR1		0.798	
InterR2		0.720	
InterR3		0.783	
InterR4		0.708	
IntraR1			0.727
IntraR2			0.625
IntraR4			0.726
IntraR5			0.830
IntraR6			0.694
KN1			0.668
KN2			0.715
KN3			0.810
KN4			0.810
MI1			0.821
MI2			0.913
MI3			0.558
PBC1			0.873
PBC2			0.877
PBC3			0.822
PI1			0.816
PI2			0.635
PI3			0.844
PI4			0.870
PI5			0.800
SE2			0.609
SE3			0.756
SE4			0.849
SE5			0.795
SN1			0.624
SN2			0.830
SN3			0.832
SN4			0.779



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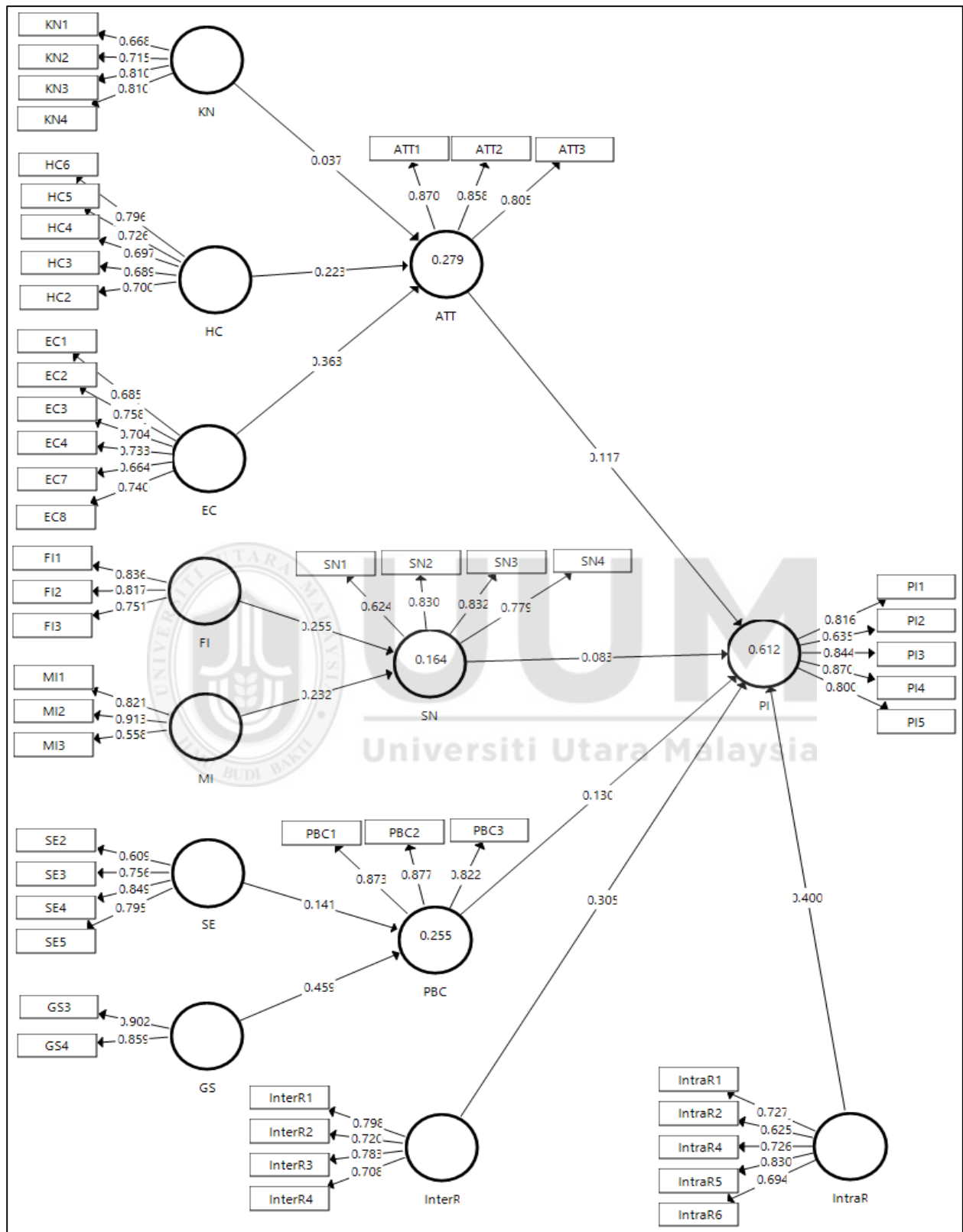


Figure 4.1
Constructs and the Remaining Items after Deletion

4.6.2 Internal Consistency Reliability

Internal consistency statistics are only appropriate for reflective constructs (Wynne W Chin, 1998). The internal consistency of a model is measured by Cronbach's Alpha (Cronbach, 1951). The Cronbach's Alpha with threshold value 0.70 and above considered as reliable measures (Wynne W Chin, 1998; Nunnally, 1978). However, for a current research study, the credence should be given more to the composite reliability estimate (Raykov & Shrout, 2002). The higher the reliability indicates the lower the error variance (Raykov, 2001). Sometimes, composite reliability also referred to construct validity (Fornell & Larcker, 1981; Holmes-Smith & Rowe, 1994). The composite reliability values of all the latent variables in the model were examined while the obtained results showed that all the correspondent composite reliability values of constructs in the model are above the recommended threshold value of 0.70 as shown in Table 4.9. (Hair et al., 2011; Henseler et al., 2009; Ringle et al., 2006).

Table 4.9
Composite Reliability Values

Constructs	Composite Reliability
Attitude (ATT)	0.882
Environmental Consciousness(EC)	0.862
Family Influence (FI)	0.844
Government Support(GS)	0.873
Health Consciousness (HC)	0.845
Interpersonal Religiosity (InterR)	0.840
Intrapersonal Religiosity (IntraR)	0.845
Knowledge (KN)	0.839
Media Influence (MI)	0.816
Perceived behavioral Control(PBC)	0.893

Purchase Intention(PI)	0.896
Self-Efficacy(SE)	0.842
Subjective Norm (SN)	0.853

4.6.3 Convergent validity

Convergent validity is referring to the fact that “a set of indicators represents one and the same underlying construct, which can be demonstrated through their unidimensionality” (Henseler et al., 2009). The purpose of convergent validity is “to examine the ability of an item to correlate with other items under the same construct to measure the same concept” (W. G. Zikmund, 2003). Fornell and Larcker (1981) suggest assessing the average variance extracted (AVE) as a criterion with values greater than 0.50. An AVE value of 0.50 can be interpreted as the fact that half of the variance of the manifest variable is explained by the latent variable on average (Henseler et al., 2009). Therefore, the convergent validity was assessed by examining average variance extracted (AVE) values and the results showed that all the AVE values are above the threshold values of 0.50 as suggested by the researchers (Hair et al., 2011; Henseler et al., 2009; Ringle et al., 2006). Hence, the convergent validity of the constructs is established and shown in Table 4.10.

Table 4.10
Average Variance Extracted (AVE)

Constructs	Average Variance Extracted (AVE)
Attitude (ATT)	0.714
Environmental Consciousness(EC)	0.511
Family Influence (FI)	0.644
Government Support(GS)	0.775
Health Consciousness (HC)	0.522
Interpersonal Religiosity (InterR)	0.567

Intrapersonal Religiosity (IntraR)	0.523
Knowledge (KN)	0.567
Media Influence (MI)	0.606
Perceived behavioral Control(PBC)	0.736
Purchase Intention(PI)	0.636
Self-Efficacy(SE)	0.574
Subjective Norm (SN)	0.595

4.6.4 Discriminant Validity

Discriminant validity is a sister measurement of convergent validity. It is used to check the dissimilarity in the measurement tools of different constructs. Discriminant validity is aimed at confirming the construct validity of the outer model which seeks to ensure that the measures which shouldn't be related, are actually not found related to conducting the analysis. It further means that each measure is more related to their own respective constructs than to other constructs. Discriminant validity indicates the extent to which indicators of a given latent variable differ from indicators of the other latent variables (Campbell & Fiske, 1959). Therefore, the correlation between constructs (i.e. off-diagonal elements) needs to be lower than the reliability estimates (i.e. diagonal elements) (Gaski & Nevin, 1985; O'cass, 2002a, 2002b; O'Cass & Pecotich, 2005; Patterson & Smith, 2003).

The validity process proceeded by examining the discriminant validity in two different phases. The first phase is through the use of Fornell-Larcker Criterion which says that square root of values of AVE must be higher than any other latent construct. Thus, the results showed that the square roots of values of AVE are higher than the rest of the correspondent latent constructs, shown the establishment of discriminant validity and revealed in table 4.11.

Conclusively, the second phase of validity process was conducted by examining discriminant validity through the heterotrait-monotrait (HTMT) ratio. The heterotrait–monotrait (HTMT) ratio has recently been established as a superior criterion compared to the more traditional assessment methods, such as the Fornell–Larcker criterion (Henseler et al., 2015). Previous studies have suggested construct thresholds of 0.85 and 0.9 for HTMT establish discriminant validity (Henseler et al., 2015; Rasoolimanesh, Roldán, Jaafar, & Ramayah, 2016). The results presented in the Table 4.12 illustrated that all the values ranging from 0.85 to 0.9. Based on the results presented, it is statistically fulfilled the heterotrait-monotrait (HTMT) ratio discriminant validity criteria suggested by Henseler et al. (2015) that all the values are below than 0.90.

Table 4.11
Discriminant Validity Fornell-Larcker Criterion

	ATT	EC	FI	GS	HC	InterR	IntraR	KN	MI	PBC	PI	SE	SN
ATT	0.845												
EC	0.480	0.715											
FI	0.417	0.471	0.802										
GS	0.155	0.109	0.155	0.880									
HC	0.414	0.458	0.356	0.256	0.723								
InterR	0.489	0.436	0.335	0.264	0.461	0.753							
IntraR	0.523	0.492	0.36	0.139	0.441	0.658	0.724						
KN	0.322	0.374	0.211	0.212	0.665	0.433	0.424	0.753					
MI	0.493	0.332	0.379	0.300	0.364	0.488	0.438	0.278	0.779				
PBC	0.068	0.008	0.083	0.486	0.235	0.218	0.041	0.206	0.298	0.858			
PI	0.520	0.407	0.301	0.236	0.459	0.683	0.701	0.429	0.488	0.224	0.797		
SE	0.153	0.056	0.195	0.192	0.129	0.121	0.055	0.152	0.137	0.229	0.095	0.758	
SN	0.430	0.459	0.343	0.192	0.319	0.354	0.412	0.274	0.329	0.034	0.41	0.135	0.771

Table 4.12
Discriminant Validity (HTMT Criterion)

	ATT	EC	FI	GS	HC	InterR	IntraR	KN	MI	PBC	PI	SE	SN
ATT													
EC	0.593												
FI	0.55	0.615											
GS	0.205	0.153	0.226										
HC	0.511	0.560	0.469	0.364									
InterR	0.62	0.553	0.453	0.369	0.594								
IntraR	0.656	0.632	0.487	0.185	0.544	0.848							
KN	0.396	0.467	0.282	0.317	0.873	0.568	0.528						
MI	0.626	0.407	0.529	0.474	0.501	0.667	0.557	0.400					
PBC	0.087	0.092	0.121	0.632	0.317	0.286	0.162	0.28	0.468				
PI	0.618	0.489	0.384	0.304	0.561	0.849	0.838	0.524	0.636	0.338			
SE	0.228	0.159	0.296	0.234	0.178	0.241	0.120	0.238	0.192	0.261	0.169		
SN	0.547	0.588	0.455	0.268	0.403	0.463	0.526	0.353	0.421	0.079	0.506	0.229	

4.7 Assessment of Structural Model

Evaluation of structural model was investigated after establishing the appropriateness of the measures in the conceptual research model. The assessment of a structural model aspect of PLS-SEM is basically on the establishment of variance explained (R^2) of the model and the significance of all the estimated path coefficients (Hair, 2014; Hair et al., 2011; Ringle et al., 2006; Ringle & Spreen, 2007). Therefore, this study uses PLS algorithm style approach to obtain the R^2 for primary and secondary endogenous variables, while the bootstrapping technique was used to obtain the significances of all the path coefficients between exogenous and endogenous variables.

Bootstrapping technique is used to test for the significance of the path coefficient since the PLS assumes that used data are not normally distributed and thus, non-parametric bootstrap procedure needs to be applied in order to obtain the significance of inner weights (Davison & Hinkley, 1997; Hair, 2014; Hair et al., 2011).

Furthermore, structural model evaluation phase of PLS examines the effect size (f^2) of the endogenous variable which investigates whether the impact of a particular exogenous variable affects the endogenous variable (Hair, 2014; Hair et al., 2011). Indeed, the f^2 of our model was evaluated by removing and replacing a particular endogenous variable in trying to see its impact on the endogenous variable.

In addition, Predictive Relevance (Q^2) of the model which is the evaluation of the magnitude of R^2 of endogenous variable is evaluated by using blindfolding technique through cross-validated redundancy (Esposito Vinzi, 2010; Hair, 2014; Hair et al., 2011; Hair et al., 2012). The blindfolding technique is adequate for evaluating cross-validated redundancy while examining the predictive relevance of the model since it includes all the key element of the path model and structural model during the operation (Hair, 2014; Hair et al., 2011). Moreover, the effect size (q^2) is recommended to evaluate in the structural model assessment in PLS-SEM (Hair, 2014). The q^2 explains the impact of a particular exogenous variable on the predictive relevance Q^2 of endogenous variable.

Table 4.13

Measures and Threshold Values for Assessment of Structural Model

Assessment Subject	Measures	Threshold Values
Coefficient of Determination	R^2	0.19 (weak), 0.33 (moderate), 0.67 (substantial).

Path Coefficient	t-value	1.28 (p < 0.10), 1.645 (p < 0.05), 2.33 (p < 0.01)
Effect Sizes	f ²	0.02 (small), 0.15 (medium), 0.35 (large)
Predictive Relevance	Q ²	0.02 (small), 0.15 (medium), 0.35 (large)

Conclusively, Table 4.13 represents assessment of parameters of the structural model in PLS-SEM such as Coefficient of Determination (R²), estimate of path coefficient, effect sizes (f² and q²) and Predictive Relevance (Q²) follow some criterion which is known as rules of thumb (Wynne W Chin, 1998; Hair, 2014; Hair et al., 2011; Henseler et al., 2009; Ringle et al., 2006; Ringle & Spreen, 2007). The Table 4.13 summarizes the measures and threshold values which are applied in this study for testing the inner model in PLS-SEM.

Testing of collinearity is important to ensure that there is no issue in the inner model of the study before assessing the structure model as suggested by Hair (2014). Table 4.14 showed the outcome of the collinearity test of the model and confirmed that there is no collinearity problem for each of the constructs because VIF values below 3.3 (Diamantopoulos & Sigauw, 2006).

Table 4.14
Collinearity assessment

	ATT	PBC	PI	SN
ATT			1.554	
EC	1.279			
FI				1.167
GS		1.038		
HC	1.971			

InterR		1.988	
IntraR		2.041	
KN	1.812		
MI			1.167
PBC		1.070	
PI			
SE		1.038	
SN		1.310	

4.7.1 Assessment of Coefficient of Determination (R^2 value)

The coefficient of determination R^2 was assessed in this study for the primary and secondary endogenous latent variables as recommended by some researchers (Hair, 2014; Hair et al., 2011; Henseler et al., 2009). Based on the argument of Hair (2014), Hair et al. (2011) and Wynne W Chin (1998), R^2 of 0.19, 0.33 and 0.67 indicate weak, moderate and substantial or good R^2 respectively. The R^2 value of 0.612 was obtained for purchase intention (PI) which is the main endogenous latent variable and shows that the R^2 for purchase intention (PI) is almost substantial. Besides that, the R^2 value of 0.279 was obtained for attitude, while R^2 values of 0.164 and 0.255 were derived for the subjective norm and perceived behavioral control. The results of coefficient of determination of endogenous latent variables are presented in Table 4.15.

Table 4.15
Coefficient of Determination R^2

Endogenous Latent Variable	R - Squared Value
Attitude	0.279
Subjective Norm	0.164
Perceived Behavioral Control	0.255
Purchase Intention	0.612

4.7.2 Hypotheses Testing

Furthermore, the confidential intervals of path coefficients were determined through the bootstrapping technique. The bootstrapping technique uses the repeated random sampling with replacement from the original sample in order to create a bootstrap sample which eventually obtains standard errors for hypothesis testing (Hair, 2014; Hair et al., 2011). Moreover, the original number of cases was used as the number of cases, and 5,000 was used as bootstrapping samples based on the recommendation of some researchers (Hair et al., 2011; Henseler et al., 2009; Ringle et al., 2006). Hence, ten hypotheses out of the eleven main hypotheses support the formulated hypotheses by using a significant level of $p < 0.01$ as depicted in Table 4.16 and presented in Figure 4.2.

Table 4.16
Results of Path Coefficients (Direct Relationship)

No	Hypotheses	Path Coefficients	Standard Error	T value	P value	Decision
H1	ATT -> PI	0.117	0.036	3.259	0.001	Supported
H2	SN -> PI	0.083	0.033	2.478	0.007	Supported
H3	PBC -> PI	0.130	0.032	4.069	0.000	Supported
H4a	InterR-> PI	0.305	0.043	7.129	0.000	Supported
H4b	IntraR-> PI	0.400	0.043	9.385	0.000	Supported
H5	KN -> ATT	0.037	0.049	0.764	0.223	Not Supported
H6	HC -> ATT	0.223	0.052	4.266	0.000	Supported
H7	EC -> ATT	0.363	0.037	9.872	0.000	Supported
H8	FI -> SN	0.255	0.048	5.279	0.000	Supported
H9	MI -> SN	0.232	0.041	5.597	0.000	Supported
H10	SE -> PBC	0.141	0.037	3.840	0.000	Supported
H11	GS -> PBC	0.459	0.046	9.888	0.000	Supported

Figure 4.2 represents validated a structural model which expresses the supported and non-supported path coefficients from the formulated hypotheses. The sample size 5,000 was used for the bootstrap while testing for the significance level of the formulated hypotheses.



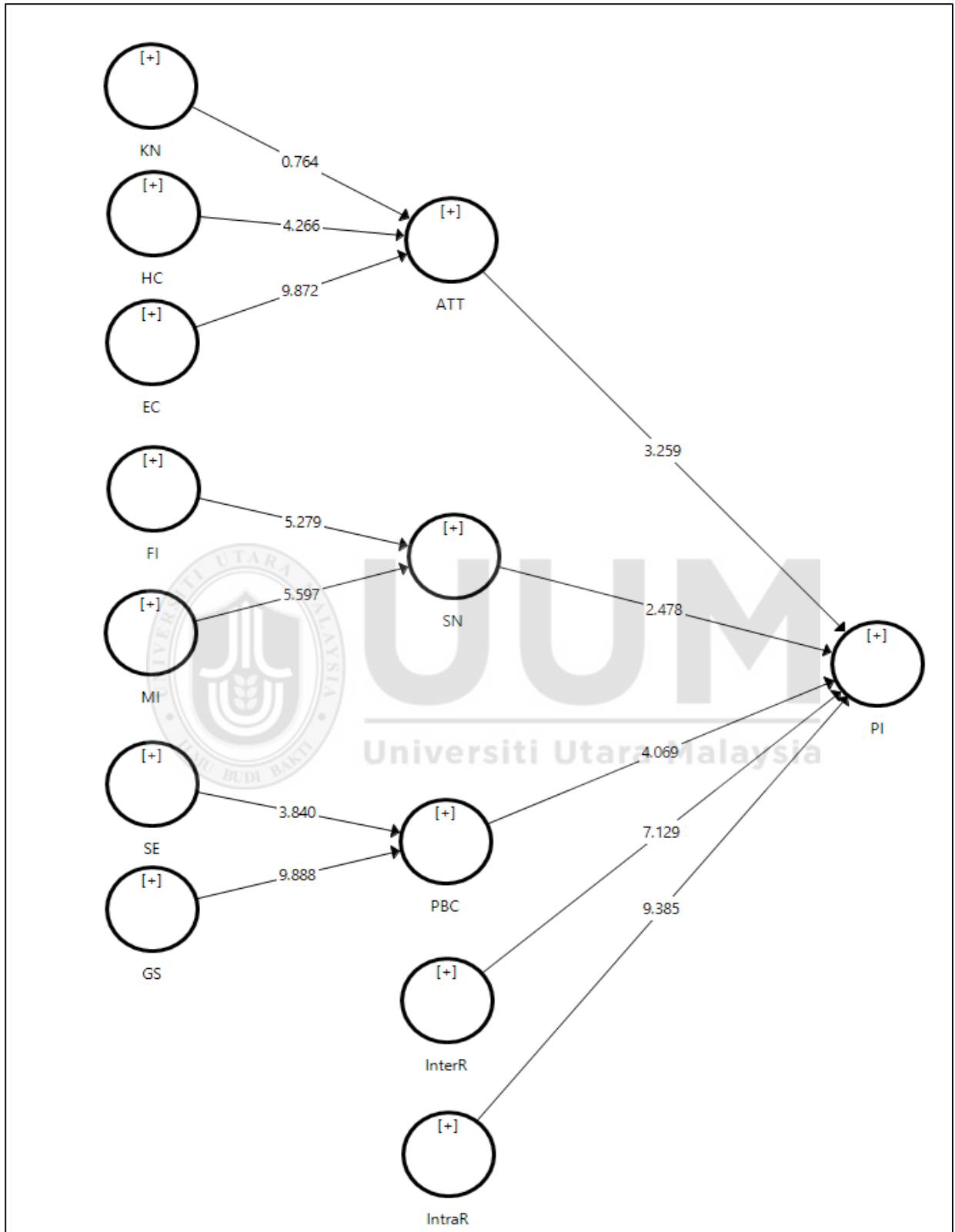


Figure 4.2
Validated Structure Model

4.7.3 Effect Size (f^2)

In addition, the f^2 effect size which is a measure of the impact of a specific exogenous construct on the endogenous construct was examined and the effect sizes of Attitude, perceived behavioral control, interpersonal religiosity, health consciousness, environmental consciousness, family influence, media influence, and self-efficacy are found to be small. From the Table 4.17 it shows that there are no effect sizes on knowledge and subjective norm, while the effect size of intrapersonal religiosity and government support is medium considering the recommendation of some researchers (Wynne W Chin, 1998; Hair, 2014; Hair et al., 2011; Henseler et al., 2009; Ringle et al., 2006; Ringle & Spreen, 2007).

Table 4.17

Values of Effect Size (f^2)

Endogenous Constructs	Exogenous Constructs	Effect Size	Remarks
PI	Attitude	0.023	Small
	Subjective norm	0.013	No effect
	Perceived behavioral control	0.041	Small
	Interpersonal Religiosity	0.120	Small
	Intrapersonal Religiosity	0.202	Medium
Attitude	Knowledge	0.001	No effect
	Health Consciousness	0.035	Small
	Environmental Consciousness	0.143	Small
Subjective Norm	Family Influence	0.067	Small
	Mass media Influence	0.055	Small
Perceived Behavioral Control	Self-Efficacy	0.026	Small
	Government Support	0.272	Medium

4.7.4 Predictive Relevance of the Model (Q² value)

The study further examined the predictive relevance (Q²) by using blindfolding procedure through the cross-validated redundancy approach. Indeed, the Q² values for a particular endogenous latent construct that is larger than zero (0) indicates that the latent variable that explains the endogenous latent construct have the predictive relevance (Hair et al., 2011; Henseler et al., 2009; Ringle et al., 2006; Ringle & Spreen, 2007). Moreover, the omission distance (D) must be between 5 and 10, while the number of cases must not be the multiple of D (Hair et al., 2011; Ringle & Spreen, 2007). Therefore, the blindfolding procedure was performed in this study with an omission distance of 6. Hence, the results from Table 4.18 show that all Q² values are larger than zero which indicates the establishment of predictive relevance.

Table 4.18
Constructs Cross-validated Redundancy

Total	SSO	SSE	1-SEE/SSO
Attitude	1,587.00	1,293.14	0.185
Subjective Norm	2,116.00	1,932.29	0.087
Perceived Behavioral Control	1,587.00	1,310.61	0.174
Purchase Intention	2,645.00	1,701.78	0.357

4.8 Multiple Regression

Finally, multiple regression was performed to answer hypothesis 12 for this study, which is related to whether religiosity explains additional variance in the intention to purchase halal cosmetic products. The multiple regression is one of the most widely used statistical techniques to evaluate whether new variables explain additional variance in the dependent variable (Kline, 2005; Hair *et al.*, 2010). This statistical technique was used by several studies (e.g. A. S. A. Al-Ajam, 2013; Benk et al., 2016; MdNor, 2005; Mohdali & Pope, 2014). Therefore, the multiple regressions were

employed to investigate whether religiosity explains additional variance in the intention to purchase halal cosmetic products in this study.

The independent variables were attitude, subjective norm, perceived behavioral control, and religiosity (interpersonal and intrapersonal). The dependent variable was the intention to purchase halal cosmetic products. SPSS 20.0 for Windows was employed to perform the multiple regression analysis. The programs entered attitude, subjective norm and perceived behavioral control first in the equation and then religiosity (interpersonal and intrapersonal). This allowed the researcher to see the effect of religiosity when it was included in the model. The regression analysis results showed more than 25% additional variance in the dependent variable as depicted in Table 4.19 below.

Table 4.19
Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	R Square Change
1	.582 ^a	.338	.334	.94319	-
2	.770 ^b	.594	.590	.73985	.255

- a. Predictors: (Constant), ATT, SN, PBC
- b. Predictors: (Constant), ATT, SN, PBC, Religiosity

4.9 Summary

This chapter presented the data analysis and results of the study. Besides providing the data regarding the general characteristics of the sample and descriptive statistics of the respondents that were involved in the study. Following the assessment of measurement model and structural model, the hypotheses were tested through PLS-SEM. ten out of the eleven direct hypotheses were supported and one was not supported.



CHAPTER FIVE

DISCUSSION AND CONCLUSION

5.1 Introduction

This chapter concludes the results of the data analysis from the previous chapter. It reviews the major findings, theoretical and managerial implications, limitations of the study and presents suggestions for future research and the final section draws a conclusion.

5.2 Discussion of the research objectives

This study investigates the antecedents of intention to purchase halal cosmetic products. Particularly, this study investigates the antecedents of behavioral intention such as attitude, subjective norm, perceived behavioral control and religiosity (interpersonal religiosity, intrapersonal religiosity) to purchase halal cosmetic. It also investigates the relationship between antecedents of attitude (knowledge, health consciousness, environmental consciousness) with attitude, antecedents of subjective norm (family influence, media influence) with subjective norm and antecedents of perceived behavioral control (self-efficacy, government support) with perceived behavioral control.

To be specific, the primary objective of this study is to determine whether attitudes, subjective norm, perceived behavioral control and religiosity effect the halal cosmetic intention. The second objective is to examine whether knowledge, health consciousness, and environmental consciousness affect the attitude. The third objective is to investigate whether family influence and mass media influence affect subjective norms. The fourth objective is to examine whether self-efficacy and government support affect perceived behavioral control. The fifth objective is to

evaluate whether religiosity contributes to explain additional variance in individuals' intention to buy halal cosmetic products.

Revisiting the study's objectives, this study is commenced to seek answers to some research questions (1) Do attitudes, subjective norm, perceived behavioral control and religiosity effect the halal cosmetic intention? (2) Do the knowledge, health consciousness and environmental consciousness affect the attitude? (3) Do family influence and mass media influence affect subjective norm? (4) Do self-efficacy and government support affect perceived behavioral control? (5) Does religiosity explain additional variance in halal cosmetic intention?

Data were gathered from medical and dental college students who are enrolled in private medical and dental colleges located in Punjab and recognized by the Pakistan Medical and Dental Council. Seven hundred and fifty questionnaires were distributed and only five hundred twenty-nine were usable and analyzed. Preliminary analysis (non-response bias test, common bias test, demographic characteristics of respondents and descriptive statistics of variables) and data cleaning tests (analysis of missing data, analysis of outliers, normality test, and multicollinearity) were conducted in order to obtain a reliable data. Finally, the data were analyzed by the employed PLS-SEM technique by using SmartPLS 3.0 to test 12 formulated direct hypotheses of the study. The empirical results provide support for 11 hypotheses.

5.3 Discussion

In this section, the findings of the present study are discussed in the context of research questions, research objectives, hypothesized relationships, theoretical framework and underpinning theories. The subheadings in this section are structured according to the research questions.

5.3.1 Objective one: To determine whether attitudes, subjective norm, perceived behavioral control and religiosity effect the halal cosmetic intention.

The present study predicted that halal cosmetic intention has four antecedents: attitude (H1), subjective norm (H2), perceived behavior control (H3) and religiosity (H4). All four paths are found to be supported. Therefore, the next paragraph discusses each hypothesis separately.

5.3.1.1 The association between attitude and halal cosmetic intention (H1)

The relationship between Attitude and intention to purchase halal cosmetic products is answerable through hypothesis 1.

Hypotheses 1: Attitude significantly and positively affects the intention to purchase halal cosmetic products.

Attitude means an individual's positive or negative assessment about performing a specific conduct. A person who has more positive attitude towards behavior is probably to develop an intention to carry out that behavior (Ajzen, 1991). In this study, consumer's attitude towards purchasing halal cosmetic products refers to an individual's positive or negative evaluation towards an intention to purchase halal cosmetic products. Attitude has long been shown to impact behavioral intentions (Ajzen & Fishbein, 1980).

As expected, attitude ($\beta = 0.117$, $t=3.259$, $p < 0.01$) was found to have a significant positive influence on the intention to purchase halal cosmetic products. This finding is in tandem with previous empirical studies in the cosmetic domain (e.g. Bachleda et al., 2012; Nikdavoodi, 2012; J. Strauss & Kleine Stüve, 2016; Sukato & Elsey, 2009; Tajeddini & Nikdavoodi, 2014; Yeon Kim & Chung, 2011). This finding also corroborates with the study by Lada et al. (2009) on intention to purchase halal products which attitude significantly and positively influence behavioral intention.

This finding validates the work of earlier studies by Abd Rahman et al. (2015), A. Aziz et al. (2013), A. J. C. M. Hashim and Musa (2016) and J. C. M. Hashim and Rosidah Musa (2014) on the effect of attitude on intention to purchase halal cosmetic products. Other studies by N. U. Ansari and Mohammed (2015) and Kaur and Osman (2014) also confirmed that attitude towards purchasing halal cosmetic products has a direct positive association with intention to purchase halal cosmetic products. Particularly, it implies that individual attitude significantly influences intention to purchase halal cosmetic products.

The significant results between attitude and intention to purchase halal products support Mukhtar and Mohsin Butt (2012), and Abu-Hussin, Johari, Hehsan, and Mohd Nawawi (2016) that attitude is the main variable which should be included in the model when examining the Muslim consumer intention towards halal products. Moreover, the significant positive result of attitude and intention to purchase signify that the intention to purchase halal cosmetic products could be enhanced by stimulating favorable attitude. The more the attitude is favorable, the greater the behavioral intention towards purchasing halal cosmetic products. As discussed later in this chapter, the

reasoning of attitude discloses that out of three factors, two factors significantly affect attitude (i.e. health consciousness and environmental consciousness). Manufacturer of halal cosmetic products can utilize these factors to build a positive attitude to purchase halal cosmetic products amongst their customers. In order to form a positive attitude about the halal cosmetic products, manufacturers should pay more attention to these factors which as greater understanding of these factors might facilitate the formation of positive attitudes which then led to high intention to purchase halal products.

This study indicates that halal cosmetic products can be extremely beneficial to customers due to its advantages over conventional cosmetic. Such as environmentally friendly products because they cannot damage the aquatic environment and terrestrial environment, against animal testing, not permit to use dead animals and protect our body from allergic reactions and harmful diseases. Thus all these advantages could make the Pakistani customers have positive attitudes which then leads towards high intention to purchase halal cosmetic products. Malaysia

From a practical point of view, the positive association between attitude and intention to purchase reveal that in communicating and giving awareness to the potential customers about the benefit of halal cosmetic products, it can be done using various channels like advertising and promotion. A positive remark or opinion from the people closest to the individuals known as reference group also plays a significant role in influencing them to purchase halal cosmetic products. The influencing of these factors will be discussed in the next hypotheses. Therefore, marketing managers should be aware of the importance of consumer's attitude since attitude plays an important role in stimulating their intention to purchase towards halal products. Greater awareness

of the importance of this factor will assist practitioners in focusing the promotional strategy to persuade the customers to purchase halal cosmetic products.

Furthermore, in developing successful marketing strategies, it requires the cosmetic companies to identify and focus on the right product for the right target market. Therefore, it is essential for companies to have customer's profiles that hold more positive attitude towards halal cosmetic products. Since youth segment is the most targeted segment by cosmetic companies, keeping the profile of their product preferences can help the companies to bring down marketing costs and enhance efficiency rather than carrying out mass marketing programs (Barutçu, 2007). Understanding the consumer's attitude will help the companies to further understand their intention to use the product or services. The result of this study also suggests that managers should examine factors to improve consumer's attitude towards halal cosmetic products. This is because if the individuals have positive evaluation about behavior, the more intention for them to perform that behavior. The more positive a person's behavioral attitude, the stronger the behavioral inclination and on the other hand, the more negative the attitude, the weaker the behavioral inclination is (Taylor & Todd, 1995a).

5.3.1.2 The relationship between subjective norm and halal cosmetic intention (H2)

The following hypothesis is measuring the association between Subjective norm and Intention to purchase halal cosmetic products.

Hypothesis 2: Subjective norm significantly and positively affects the intention to purchase halal cosmetic products.

Subjective norm refers to when individuals perceive the decision whether to perform a particular behavior of social pressure, it reflects the impact of significant others on individual behavior or group decision-making (Ajzen, 1991). In this study, subjective norm comprises of two antecedent factors namely family as an interpersonal influence and media as an external influence. The result of this study also supports hypothesis 2 that subjective norm ($\beta = 0.083$, $t = 2.478$, $p < 0.01$) has a positive and significant relationship with the intention to purchase halal cosmetic products. The significant result of subjective norm and intention to purchase halal cosmetic products in this study is congruent with prior empirical studies of halal cosmetic domain literature (e.g. N. U. Ansari & Mohammed, 2015; A. Aziz et al., 2013; Kaur & Osman, 2014). The finding is also in line with other studies of conventional cosmetic related (e.g. Bachleda et al., 2012; Sukato & Elsey, 2009; Tajeddini & Nikdavoodi, 2014) found that subjective norm has a direct significant positive relationship with behavioral intention to purchase cosmetic products. In particular, the result in this study validates the previous work by Yeon Kim and Chung (2011), Nguyen (2014) on the positive effect of subjective norm on intention to purchase organic cosmetic products. The positive relationships between subjective norm and intention to purchase in this study are also consistent with previous findings of Bonne et al. (2007), Abu-Hussin et al. (2016), and Lada et al. (2009) who reported that perceived pressure or opinion from the people who consumers think is important will positively affect their intention to purchase halal products.

The significant result of this study proposes that social pressure is an influencing factor in determining one's behavior towards an intention to purchase halal cosmetic products. Ajzen (1991) proposed that attitudes towards behavior, subjective norm, and perception of behavioral control are individual's determinant factors of behavioral intention which can influence their behavior.

This exhibits that user behavioral intention is not only determined by their attitude but also by other factors such as friends and mass media. In other words, it can be said that when customers find that people around or closest to them have purchased halal cosmetic products, they will have more intention towards to purchase halal cosmetic products. The result of this study proposes that the greater influence of social pressure, the stronger behavioral intention to purchase halal cosmetic products. The influential of subjective norm on intention to purchase halal cosmetic products among Muslim consumers is constant with the study by Mukhtar and Mohsin Butt (2012) which stated that subjective norm is a behavior or belief which seemed to be very common among the halal product users in Muslim countries.

One more explanation for this result could be a collectivist society such as Pakistan (Hofstede, 2005). Pakistani consumers will probably be affected by the opinions of important others when making cosmetic purchase decisions. To avoid conflicts in decision-making people give more priority to others in a collectivist society (Ohbuchi, Fukushima, & Tedeschi, 1999). On the other hand, the finding might be due to the fact that young adults are more vulnerable to social influence than older adults as they are still building up their self-character (Rivis & Sheeran, 2003). Another possible reason for the significant result is due to reasoning approach of subjective norm taken in this study. As proved in a study by Bhattacharjee (2000), broadening the scope of the subjective norm can encounter the insignificant result of the subjective norm in previous studies.

Moreover, cosmetic companies might enhance their promotional activities by effective use of both communication channels external (mass media) and interpersonal (family). The companies might introduce the program like members get members by allocating certain incentives for those who

introduce or bring their friends and family to use halal cosmetic products. The strategy suggested might be practically implemented if friends and family significantly influence intention to purchase halal cosmetic products. Positive remark from those reference groups (i.e. friends and family) will help to promote intention to purchase halal cosmetic products as negative word of mouth will reduce the intention to purchase halal cosmetic products of the people who are closest to them. Therefore, cosmetic companies need to put the effort on focusing on enhancing subjective norm since this factor will stimulate the intention to purchase cosmetic products.

5.3.1.3 The relationship between perceived behavior control and halal cosmetic intention (H3)

The third hypothesis is to answer the second research question on the association between Perceived behavioral control and intention to purchase halal cosmetic products.

Hypothesis 3: Perceived behavioral control significantly and positively affects the intention to purchase halal cosmetic products.

Perceived behavioral control refers to the individual to perform easy or difficult to perceive the extent of a particular behavior, it reflects the individual's behavioral factors promote or hinder the implementation of consciousness (Ajzen, 1991). It reflects one's beliefs with respect to access to the internal factor such as self-efficacy and external factor such as government support that may impede the performance of the behavior. As expected, the findings of this study also accept hypothesis 3 that perceived behavioral control ($\beta = 0.130$, $t = 4.069$ $p < 0.01$) has positively and significantly affected the intention to purchase halal cosmetic products. Consistent with a number of previous studies in cosmetic settings (e.g. Bachleda et al., 2012; Ferraz, 2011; J. Strauss &

Kleine Stüve, 2016; Yeon Kim & Chung, 2011), perceived behavioral control is found to have a significant positive direct effect on behavioral intention.

The finding of this study verifies the results of earlier studies by Kaur and Osman (2014) and A. Aziz et al. (2013) on the important role of perceived behavioral control in stimulating intention to purchase halal cosmetic products. The finding also supports the theory that perceived behavioral control is a determinant factor of behavioral intention (Ajzen, 1991). The reasoning approach of the perceived behavioral control reports that antecedents of perceived behavioral control (self-efficacy, government support) significantly influence individual's perception of his or her ability to purchase halal cosmetic products. Cosmetic companies should focus on these factors in persuading customers to purchase halal cosmetic products. Details of the discussions will be discussed in later section.

The important and significant role of perceived behavioral control has also been highlighted by (A. Khan & Azam, 2016). They indicate that perceived behavioral control was a significant determinant of intention to purchase halal products. The study by Afendi et al. (2014), and Abu-Hussin et al. (2016) proved that perceived behavioral control have significant and directly influence intention to purchase halal products. The significant result of perceived behavioral control on intention to purchase in this study proposed that individuals are likely to engage in halal products when they believe that they have the ability to purchase the halal products. In other words, the person or individual will perform in certain behavior if they believe that they have enough resources and have their confidence in performing the specific behavior. In order to purchase halal

products, an individual's degree of control can directly impact the intention to purchase halal products (e.g. Haque et al., 2015; Kaur & Osman, 2014).

One plausible explanation for this significant result is that individuals are likely to engage halal cosmetic products when they believe that they have the ability and resources to purchase halal products. With respect to the intention to purchase halal cosmetic products, higher levels of self-efficacy and the belief of having enough resources in shape of government support will lead to higher levels of perceived behavioral control which then lead to higher levels of behavioral intention. In other words, the lack of facilitating resources (government support) represents barriers to purchase may inhibit the formation of intention and usage (Compeau and Higgins 1991). The significant finding has also noted that when investigating intention to purchase halal cosmetic products, researchers need to emphasis on the influence of perceived behavioral control.

Moreover, from a managerial standpoint, the significant result of perceived behavioral control reveals that in making decision to purchase the products or services that have much volitional control, consumers do not just only need more resources (time, information, etc.) but also their level of confidence in making the right decision. Therefore, companies need to ease their customers or be hassle free towards to purchase halal cosmetic products. Marketers should put their effort in enhancing the consumer's perceived behavioral control such as by demonstrating the benefits of halal cosmetic products, for example, the use of pure ingredients, against animal cruelty and free from harsh impurities. In addition, the companies may use the experts or celebrity's involvement in order to increase the consumers' confidence towards halal cosmetic products.

All in all, the significant result of the influence of perceived behavioral control on behavioral intention indicates that the consumer's behavioral intention to purchase halal cosmetic products is determined not only by their attitude and social pressure but also their own resources and abilities. The consumers perceived behavioral control which is reflected by their ability and resources owned by them are important in determining intention to purchase halal cosmetic products. This is due to without these facilitating conditions, it will affect to the lower intention to purchase product or services (Taylor & Todd, 1995a).

5.3.1.4 The relationship between religiosity and halal cosmetic intention (H4)

The following hypothesis answers the first research question on the relationship between religiosity and Intention to purchase halal cosmetic products.

Hypotheses 4 = Religiosity significantly and positively affect the intention to purchase halal cosmetic products.

Religiosity can be defined as “the extent to which an individual is committed to his religion and to which that religion is reflected in the individual's attitudes and behavior” (B. R. Johnson et al., 2001). Or we can say that religiosity is a measure of religiousness of persons (O'connell, 1975). As hypothesized, religiosity in term of interpersonal religiosity (H4a) ($\beta = 0.305$, $t = 7.129$, $p < 0.01$) and intrapersonal religiosity (H4b) ($\beta = 0.400$, $t = 9.385$, $p < 0.01$) is found to have a significant positive relationship with the intention to purchase halal cosmetic products. Furthermore, results indicate that Muslim consumer has higher intrapersonal (cognitive) religiosity as compared to interpersonal (behavioral) religiosity. Numerous researchers (e.g. Abd Rahman et al., 2015; N. U. Ansari & Mohammed, 2015; Mohezar et al., 2016) have proved that religiosity

has positively affected intention to purchase halal cosmetic products. The significant influence of religiosity on intention to purchase halal products or services has also been verified in a number of studies (e.g. Abou-Youssef et al., 2015; Mukhtar & Mohsin Butt, 2012; Souiden & Rani, 2015; Zaimy Johana Johan, 2014). This finding validates the work of earlier studies by Baig and Baig (2016), Farrag and Hassan (2015), Z. A. Ansari (2014), Echchabi and Aziz (2012) and Rehman and Shahbaz Shabbir (2010) that acknowledged religiosity has a positive direct influence on Muslims consumption behavior. The finding also supports the need for further verification by Souiden and Rani (2015) on the impact of religiosity in halal products. This result may contribute in terms of validation on the impact of religiosity in the halal cosmetic domain that significantly influences intention to purchase halal cosmetic products.

The findings indicate that religiosity can be explored as a possible factor in profiling generation Y consumer for segmentation purposes because Muslims in Pakistan consider buying halal cosmetic products in light of the fact that these products don't damage or negate their religious beliefs and values. Marketers can consider using religiosity as a segmentation variable in addition to other demographic and psychographic factors. Incorporation of localized religious symbols and values in the marketing communication programs of halal products may help in gaining acceptance among consumers. Islam as a religion has an enormous impact on the consumption behavior of Muslim consumers so, business visionaries whose nations have lion's share of Muslims, or who needs to enter the Muslim nations with their business ought to consider the element of religion in the development and advertising of products.

Since confirmation demonstrates that religiosity among Muslim consumers influences their behavioral intention towards the purchase of halal cosmetic and beautification products. Cosmetic companies need to mull over when introducing new cosmetic products to Muslim markets. Manufacturers of cosmetic products need to ponder their markets painstakingly in case if they are to build up a strong presence in these markets. Marketers should be educated on the importance of religiosity to Muslim consumers if they are willing to penetrate Muslim markets. Furthermore, societies would witness a healthy growth of industry when religiosity is given more attention in marketing communications in general. So halal cosmetic manufacturing companies develop marketing communication strategies according to Islamic Shariah that project Islamic values such as the use of sex appeal are rejected in Islam, where advertisers exploit, expose and portray the women and her body. For example, the following verses of Quran denial the use of sexual appeal.

“Tell the believing men to reduce [some] of their vision and guard their private parts. That is purer for them. Indeed, Allah is Acquainted with what they do.” (Quran 24:30).

“And tell the believing women to reduce [some] of their vision and guard their private parts and not expose their adornment except that which [necessarily] appears thereof and to wrap [a portion of] their headcovers over their chests and not expose their adornment except to their husbands, their fathers, their husbands' fathers, their sons, their husbands' sons, their brothers, their brothers' sons, their sisters' sons, their women, that which their right hands possess, or those male attendants having no physical desire or children who are not yet aware of the private aspects of women. And let them not stamp their feet to make known what they conceal of their

adornment. And turn to Allah in repentance, all of you, O believers, that you might succeed.”

(Quran 24:31).

Furthermore, marketers should communicate accurate and truly representative information about the product through advertisement. There should be full disclosure regarding the terms and conditions of warranty and guarantee, no misleading price or saving claims. There is a considerable evidence in Quran regarding the truthfulness, justice, and promises. Such as some of the verses in the Quran state:

“And let those [executors and guardians] fear [injustice] as if they [themselves] had left weak offspring behind and feared for them. So let them fear Allah and speak words of appropriate justice.” (Quran 4:9).

“O you who have believed, fear Allah and speak words of appropriate justice.” (Quran 33:70).

“And they attribute to Allah that which they dislike, and their tongues assert the lie that they will have the best [from Him]. Assuredly, they will have the Fire, and they will be [therein] neglected.” (Quran 16:62).

“And do not approach the property of an orphan, except in the way that is best, until he reaches maturity. And fulfill [every] commitment. Indeed, the commitment is ever [that about which one will be] questioned.” (Quran 17:34).

It is clear evident from the above verses of Holy Quran that advertising strategy should be honest, truthful, decent, legal according to Shariah. Thus, it is important for an advertiser to customize communication strategy according to Islamic teachings which fit in Muslim consumer segment.

5.3.2 Objective two: To examine whether knowledge, health consciousness, and environmental consciousness affect the attitude.

The customer's attitude means the degree to which they have favorable or unfavorable a (positive or negative) feelings towards halal cosmetics products. The present study shows that attitude towards halal cosmetic intention has three antecedents: (H5) knowledge, (H6) health consciousness and (H7) environmental consciousness. Two paths are found to be supported and related to H6 and H7, while one path found not to be supported: H5. Therefore, the next paragraph will discuss each hypothesis separately.

5.3.2.1 The relationship between knowledge and attitude (H5)

The following hypothesis answers the second research question on the relationship between knowledge and attitude towards an intention to purchase halal cosmetic products.

Hypotheses 5 = knowledge significantly and positively affect the attitude towards an intention to purchase halal cosmetic products.

Knowledge refers to “the facts, feelings or experiences are known by a person or a group of people; it can also be defined as awareness, consciousness or familiarity gained by experience or learning”.

As hypothesized, knowledge ($\beta = 0.037$, $t = 0.764$, $p > 0.01$) is found to have an insignificant effect on attitude towards an intention to purchase halal cosmetic products. The literature on knowledge

and attitude has provided mixed evidence of the impact of knowledge on consumer's attitude towards an intention to purchase halal products. Some researchers have found evidence that knowledge is the main reason for Muslims to purchase halal products (Hamdan, Issa, Abu, & Jusoff, 2013; Putit & Johan, 2015; Shaari & Mohd Arifin, 2010). However, other studies have shown that knowledge is not an important factor for selecting halal products (Abd Rahman et al., 2015; Ahlam Nuwairah Ahmad et al., 2015). The findings of this research align with the former research stream and reveal that knowledge does not play a major role in determining consumer attitude towards an intention to purchase halal cosmetic products.

The plausible explanation of this result is that the consumers in Muslim majority country, e.g. Pakistan, have a complacent attitude towards products available in the country. They possess a low awareness of alternative non-halal products, because of the general perception that all products available in a Muslim country would be halal, whether or not they are certified. Therefore, there is very low prevalence among consumers to actively regard labels while buying consumables (Othman, 2006). Evidence suggests that consumers from Muslim minority countries are more actively aware of the presence of halal and non-halal alternatives in the market (Bonne et al., 2007).

Additionally, there is little to no awareness or knowledge in Pakistani consumers regarding personal care products and cosmetics (N. U. Ansari & Mohammed, 2015; Mukhtar & Mohsin Butt, 2012; Salman & Siddiqui, 2011). The general perception is that personal care products that are manufactured in Pakistan or are legally imported into the country are halal. The reason cited most frequently by respondents is that since Pakistan is a Muslim-majority country, it is the responsibility of the government to ensure the presence of halal products, across all product

categories (food as well as non-food). This confusion may have led to an insignificant relationship reported between knowledge and attitude. The manufacturing companies in Muslim majority countries e.g. Pakistan need to develop strategies that could improve consumer's awareness or knowledge regarding halal cosmetic products because the lack of knowledge hampers their intention to actively purchase them.

5.3.2.2 The relationship between health consciousness and attitude (H6)

The following hypothesis answers the second research question on the relationship between health consciousness and attitude towards an intention to purchase halal cosmetic products.

Hypotheses 4 = Health consciousness significantly and positively affect the attitude towards an intention to purchase halal cosmetic products.

Health consciousness means the degree with which someone tends to care about their health (Leong & Paim, 2015). In this study context, health consciousness means a one's willingness to give efforts to maintain his/her health. As hypothesized, health consciousness ($\beta = 0.223$, $t = 4.266$, $p < 0.01$) is found to have a significant positive effect on attitude towards an intention to purchase halal cosmetic products. This result is consistent with previous research on that relationship (e.g. R. Kaynak & Ekşi, 2014; Michaelidou & Hassan, 2008; Yadav & Pathak, 2016a) which found that health consciousness has a significant direct positive effect on attitude. The positive relationship between health consciousness and attitude in this study is consistent with previous findings of J. Strauss and Kleine Stüve (2016) who reported that health consciousness had a significant direct positive influence on attitude towards an intention to purchase cosmetic products. In contrast, (Yeon Kim & Chung, 2011) refute the findings of (Saleem & Recker, 2014; J. Strauss & Kleine

Stüve, 2016) that health consciousness has an positive effect on consumer attitude towards cosmetic products. The probable reason for this positive significant result is because generation Y consumers of developing countries e.g. Pakistan are conscious about their health related issues and consider wellness lifestyle as an imperative parameter in their consumption behavior (Yadav, 2016; Yadav & Pathak, 2016a).

The significant effect of health consciousness on attitude implies that in order to form the individual's positive attitude towards an intention to purchase halal cosmetic products, they need to be formed first by the health benefit of using halal cosmetic products before individuals start using cosmetic products. There are various health benefits of halal cosmetic products such as the use of pure ingredients, free from harsh impurities, prevent skin damages or allergic reactions and cannot affect body's hormone systems and nervous system that leads to infertility in men and women in addition to other serious diseases such as breast cancer etc. Therefore, it is a need for halal cosmetic manufacturing companies to highlight those benefits as valuable features of halal cosmetic products. Halal cosmetic manufacturing companies should also address and promoting these benefits so that the existing customers and potential customers will develop a positive attitude towards halal cosmetic products.

Moreover, the effect of health consciousness is important since it is related to the motives why individuals have positive or negative intention to buy the cosmetic products. As stressed by Saleem and Recker (2014) the individual will have positive and significant intention to buy a cosmetic or personal care products, if he or she perceived that it will be beneficial for health. The significant result in this study also provides important evidence to the theoretical and empirical perspective

that health consciousness plays a significant role in determining consumer's intention, particularly in halal cosmetic products.

Thus, researchers and marketers need to utilize health consciousness construct in determining the intention to purchase halal cosmetic products. Utilizing health consciousness construct is able to facilitate researchers and marketers in understanding consumer's attitude towards an intention to purchase halal cosmetic products. The important roles of health consciousness obviously show that this construct cannot be omitted from the model due to excessive support by previous studies.

5.3.2.3 The relationship between environmental consciousness and attitude (H7)

The following hypothesis answers the second research question on the relationship between environmental consciousness and attitude towards an intention to purchase halal cosmetic products.

Hypotheses 4 = Environmental consciousness significantly and positively affect the attitude towards an intention to purchase halal cosmetic products.

In this study, environmental consciousness refers to “a motive raising individuals' awareness of the negative environmental outcomes associated with humankind careless behaviors as well as companies, products or brands and reshaping their attitudes and behaviors in order to decrease hazards of these agents' operations upon nature”. As hypothesized, the result of this study supports hypothesis 7 that environmental consciousness ($\beta = 0.363$, $t = 9.872$ $p < 0.01$) affects the attitude towards an intention to purchase halal cosmetics products. The positive relationship between

environmental consciousness and attitude has been proved in a number of previous studies (e.g. Hartmann & Apaolaza-Ibañez, 2012; R. Kaynak & Ekşi, 2014; Yadav & Pathak, 2016a, 2016b).

Prior studies in the cosmetic domain also verified that environmental consciousness significantly and positively affects the attitude towards an intention to purchase cosmetic products (e.g. Saleem & Recker, 2014; J. Strauss & Kleine Stüve, 2016; Yeon Kim & Chung, 2011). This result is perhaps because of consumer awareness about ecological issues and purchase environmentally friendly products are on an increase in emerging economies e.g. Pakistan (Khare, 2015). Moreover, the youth of developing nation such as Pakistan are conscious about environmental related issues and consider eco-friendly products as an important parameter in their consumption behavior (Yadav & Pathak, 2016b).

In light of findings, the marketers are recommended to stress on the giving information to the consumers suggested emphasizing on the providing information to the consumers, how they can still consume the products being environmentally friendly in nature (Roberts & Bacon, 1997). This research acknowledged a clear and constant relationship between environmental consciousness and consumer intention to purchase halal cosmetic products. Thus the need arises to create awareness among Muslim consumers by labeling halal cosmetics products with environmental claims that may significantly and positively affect their attitude and intention with respect to halal cosmetic products. Furthermore, the findings suggest that marketers should focus on the consumers that are more altruistic in nature mean “having a higher concern for the environment” and have a significant positive attitude toward making change by purchasing environmentally friendly products.

5.3.3 Objective three: To investigate whether family influence and mass media influence affect subjective norms.

Ajzen (1991) defined subjective norm as “the perceived social pressure to perform or not to perform the behavior”. This study shows that subjective norm towards halal cosmetic intention has two antecedents: family influence (H8) and media influence (H9). These two paths are found to be supported. Therefore, the next paragraph will discuss each hypothesis separately.

5.3.3.1 The relationship between family influence and subjective norm (H8)

This study hypothesizes that individuals will have a higher intention to purchase halal cosmetic products if they have socially supportive reference groups like family, who are halal product users. In this study, reasoning approach splited the subjective norm into the family (interpersonal influence) and media (external influence) who could influence individuals to purchase halal cosmetic products. As expected, the hypothesis for family ($\beta = 0.255$, $t = 5.279$, $p < 0.01$) are found to have a significant positive effect on the subjective norm. Therefore, hypothesis 8 are supported in this study.

The finding of this study is consistent with previous studies (e.g. A. S. Al-Ajam & Md Nor, 2015; Ng & Rahim, 2005; Nor & Pearson, 2008; Shih & Fang, 2004) which found that family influence has a significant positive effect on the subjective norm. The result of this study shows that the interpersonal influence (i.e. family) is found to have a significant positive effect on the subjective norm. The internal factors for individuals which usually come from the connection with people closest to them will influence their intention to purchase halal cosmetic products (N. U. Ansari & Mohammed, 2015). The significant finding in this study validates the earlier study by Teng and

Jamaliah (2013) that family influence plays an important role in defining Muslim consumers intentions towards halal labeled beautification products. Lada et al. (2009) also verified that interpersonal influences (i.e. family, friends, and colleagues) are strongest referent points in halal consumption behavior.

The main reason for this result could be that in individualistic societies like western societies individuals perceived themselves as independent and autonomous of the group and importance personal goals over collective goals. In contrast, in collectivistic societies such as Pakistan, individuals have a tendency to perceive themselves as interdependent with their group and have a tendency to strive in-group as opposed to individual goals priority (Bonne et al., 2007).

From a practical point of view, the finding of this study proposes that interpersonal communication channels like family members (i.e. wives, husbands, mothers and fathers, brother, sister, grandparents, and grandchildren) do influence an individual intention to purchase halal cosmetic products. The result of this study also proved the endorsement from interpersonal communication channel towards halal cosmetic buying behavior might affect the individual's beliefs and confidence in making the decision to purchase halal products. Therefore, halal cosmetic manufacturing companies should focus on this communication channel in their promotional effort campaign, and developed more effective advertising. Understanding of interpersonal communication channel will aid halal cosmetic manufacturing companies to achieve the promotional goals and objectives in increasing intention to purchase halal cosmetic products and consumption behavior

This finding also highlights that if the consumers believe that people around or closest to them have to use halal cosmetic products, their intention to purchase halal cosmetic products will be higher. Halal cosmetic manufacturing companies might utilize the positive word of mouth strategy towards promoting and persuading the consumers to purchase halal cosmetic products by stressing the benefit of using the halal cosmetic products. As recommended by Bhattacharjee (2000), the companies need to consider word of mouth communication because it effects companies reputation and competitive position.

5.3.3.2 The relationship between media influence and subjective norm (H9)

Mass media refers to a diversified collection of communication channels such as broadcast media, digital media, outdoor media, print media, event organizing and public speaking. In this study context, mass media influence refers to “the influence or pressure of the mass media to perform the behavior” (A. S. Al-Ajam & Md Nor, 2015). As hypothesized, mass media influence ($\beta = 0.332$, $t = 5.597$, $p < 0.01$) is found to have a significant positive effect on subjective norm towards an intention to purchase halal cosmetic products. In accordance with earlier studies (e.g. H.-F. Lin, 2007; Renda dos Santos & Okazaki, 2015; Tsai et al., 2015) the findings confirmed that mass media influence has a significant direct positive effect on the subjective norm. Furthermore, the positive relationship between mass media influence and the subjective norm in this study is consistent with prior findings of A. S. Al-Ajam and Md Nor (2015) and Al-Majali and Nik Mat (2010) who reported that in Muslim context mass media influence had a significant direct positive influence on the subjective norm.

The probable reason for that result is because of the mass media such as television, radio, magazine, and the newspaper was the main motivator factor of generation Y consumption behavior e.g. halal cosmetic consumption behavior (E. Tan, Lau, & Young, 2016; Teng & Jamaliah, 2013). Pakistan has a vibrant media landscape. Media of Pakistan consist of several different types of communication channels such TV channels, radio channels, newspapers, magazines and the internet-based websites. These diversified communications channels were considered a very important source of information regarding halal cosmetic products in Pakistan (e.g. Geo TV, 2013; Dunyan News, 2015).

The noteworthy findings suggest that mass media making customers more aware of halal cosmetic products, which in term increase their subjective norm. This is not surprising given that diversified types of mass media channels are generally accessible in customers' lives. Furthermore, the mass media serves as important sources of information for an extensive range of topics (i.e. halal cosmetic). In this manner, the mass media could be valuable channels for increasing customer's knowledge about halal cosmetic products. From a practical point of view, the researcher believes that using different types of persuasive advertisements such as pathos (an appeal to emotion), logos (an appeal to logic or reason) and ethos (an appeal to celebrity or character) can affect the customers' consumption behavior regarding cosmetic products. But marketers ensure that media strategy should not promote unethical, un-Islamic or unhealthy motives. Thus, Muslim consumer subjective norm will be influenced.

5.3.4 Objective four: To examine whether self-efficacy and government support affect perceived behavioral control.

The current study shows that perceived behavior control towards halal cosmetic intention has two antecedents: self-efficacy (H10) and government support (H11). These two paths are found to be supported. Therefore, the next paragraph will discuss each hypothesis separately.

5.3.4.1 The relationship between self-efficacy and perceived behavior control (H10)

This study hypothesized self-efficacy significantly and positively affects perceived behavioral control. Self-efficacy in this study can be referred “the confidence one feels about performing a particular behavior, including confidence in overcoming the barriers to achieving that behavior” (Bandura, 1986). As hypothesized, self-efficacy ($\beta = 0.141$, $t = 3.840$, $p < 0.01$) have a positive significant effect on perceived behavioral control. Therefore, the result of this study supports the hypothesis H10. The significant result of this study is consistent with the results from previous studies (e.g. Hsieh; Nor & Pearson, 2008; Shih & Fang, 2004).

The result of this study signifies that efficacy or confidence to purchase halal cosmetic products might affect an individual’s perception of behavioral control and later affect intention to purchase to purchase halal cosmetic products which in turn will influence the actual purchase of halal cosmetic products. The finding reported in this study supports A. S. Al-Ajam and Md Nor (2015) finding that Muslim consumer with high self-confidence reported higher control about the intention to product or services. The result also verifies the finding by Al-Majali and Nik Mat (2010) which claimed that self-efficacy as an important determinant of perceived behavioral control in Muslim collectivistic societies e.g. Pakistan. The significant result of self-efficacy

reveals that individuals with high level of self-efficacy can enhance their inclination towards an intention to purchase halal cosmetic products due to they have no fear of impure ingredients, harsh impurities, skin damages or allergic reactions, hence they can easily use halal cosmetic products.

The finding of this study proposes that halal cosmetic manufacturing companies might focus their marketing effort to improve individual's self-efficacy towards an intention to purchase halal cosmetic products. The individuals that have higher self-efficacy might have higher control towards an intention to purchase halal cosmetic products. The significant result of self-efficacy implies that the consumers of halal cosmetic products will have a higher confidence level if they have guidance towards using halal cosmetic products.

Hence, in enhancing the consumer's efficacy or confidence and reducing purchase and consumption of conventional cosmetic products, halal cosmetic manufacturing companies should organize family contests and games because these types of promotional activities are not permissible in Islam. But marketers should keep in mind that contests and games should be fair and unbiased. In addition, product sampling marketing strategies also used to eliminate any doubt or hesitation they might have.

Thus, it is important to note that self-efficacy plays an important role in influencing consumer control beliefs towards an intention to purchase halal cosmetic products. As declared by Bandura (1995), people who have high self-efficacy prefer to carry out more challenging tasks. In other words, people with high self-efficacy are likely to perform a related behavior compare to those

who have low self-efficacy. Therefore, in order to increase the perceived behavioral control, the consumer's self-efficacy needs to be enhanced respectively.

5.3.4.2 The relationship between government support and perceived behavior control (H11)

Government support refers to “the facilitation of the condition which translates into how available the resources which are needed for the behavior are to be carried out”(Harry C Triandis, 1979). As hypothesized, the results indicate that government support ($\beta = 0.459$, $t = 9.888$, $p < 0.01$) have a positive significant effect on perceived behavioral control. Hence, hypothesis 11 is supported. This finding has also been supported in other studies (e.g. Al-Majali & Nik Mat, 2010; M. Tan & Teo, 2000; Teo & Pok, 2003).

This result indicates that the Pakistani consumer feels that the Pakistan government has a significant impact on their decisions toward intentions to buy the halal cosmetic products. This reveals that the government in Pakistan encourages the non-food halal consumption behavior. The results suggest that the Pakistani customers look to the government for possible direction on whether it is worthwhile to adopt halal cosmetic products. This reveals that the government in Pakistan encourages the kind of consumption that could lead to better lives for Pakistani consumers. The Pakistan government actions and decisions are supporting the halal consumption behavior such as ministry of science and technology issue the list of non-halal products on the recommendation of Pakistan halal authority, centralized Sariah board for the development of halal regulations and halal certification, pricing control policies and number of events such as seminars and workshop for the awareness of food and non-food halal products.

5.3.5 Objective five: To evaluate whether religiosity contributes to explain additional variance in individuals' intention to purchase halal cosmetic products.

Regarding the fifth research objective, it is to evaluate whether religiosity contributes to explain additional variance in individuals' intention to purchase halal cosmetic products. This study has found that religiosity explains additional variance 25% in individuals' intention to purchase the halal cosmetic product. As an explanation of additional variance supports religiosity construct as a predictor of behavioral intention to purchase halal cosmetic products. The probable reason for this result is because 93% Pakistani says that religion is very important in their lives (McCarthy, 2016). In light of these findings, marketers should pay more attention to religiosity construct in their advertising and promotional strategies such as be honest, avoid indecent language, ambiguous statements, fake description, sexual appeals (i.e. muscular men, nudity and pin-up girls), romance appeals and music appeals because they are not according to Islamic Shariah.

5.4 Contributions of the Research

The result of this study provides several significant theoretical, methodological contributions and practical implications. Details of the contributions and implications are discussed below:

5.4.1 Theoretical Contribution

From a theoretical standpoint, this research has several contributions to the existing body of literature. First, this study was implemented in the halal cosmetic domain, where the volume of research on this topic is very scarce. Moreover, this research has included a new construct which is religiosity into the model. The findings of this study have shown that religiosity construct

increases the BRT model predictive power to understand behavioral intention to purchase halal cosmetic products. While attitude, subjective norm, and perceived behavioral control explained the low level of variance for intention to purchase halal cosmetic products, by adding religiosity construct to the BRT model, the BRT model explains the additional variance.

Second, to date, few empirical studies have investigated the determinants of religiosity from a youth perspective in marketing literature. Researchers in marketing and consumer behavior agree that among of these studies researchers do not agree whether religiosity is a uni-dimensional construct or a multidimensional construct and which dimension of religiosity has a most important impact on consumption behavior. The findings of this study propose that, in the context of non-food halal products (halal cosmetic), the religiosity construct is multidimensional in term of (intrapersonal religiosity, interpersonal religiosity). The results of the present study further showed that these two dimensions of religiosity have a differential effect on certain aspects of consumer behavior. For example, Muslim respondents use of information from interpersonal sources (family) were influenced by the behavioral dimension of religiosity (interpersonal religiosity) while Muslim consumers use of information from external sources (mass media) were influenced by the cognitive dimension of religiosity (intrapersonal religiosity). Moreover, intrapersonal religiosity has more impact on behavioral intention as compared to interpersonal religiosity. Since this study focuses on halal cosmetic products, this study suggests the need to incorporate religiosity in other non-food halal products.

Third, the findings of this study contribute to the current literature by empirically confirm the relationship between religiosity and consumer behavior in a non-western culture context (Pakistan,

a Muslim dominant country). Most of the previous studies on the relationship between religiosity and consumer behavior have been done in western context, where Catholics, Jews, and Protestants are predominant in the society. However, due to their heterogeneous societies, these studies provide incomplete evidence of the general conclusion on the association between these two constructs (religiosity/consumer behavior).

Fourth, the results of this study also show that attitude, subjective norm, perceived behavioral control, and religiosity has a significant effect on behavioral intention to purchase halal cosmetic products. This study has empirically supported behavioral reasoning theory of Westaby (2005a) which is contexts specific, as well as the theory of planned behavior which manages to validate these constructs on behavioral intention. The significant results of this study also indirectly recognize the efforts taken by prior researchers in adopting well-grounded theory from other fields such as social psychology and apply in the Islamic marketing domain. This study points out that the importance of utilizing a well-established theory to investigate halal consumption behavior.

Fifth, this study employed a complete reasoning approach on global motives (i.e. attitude, subjective norm, perceived behavioral control) that leads global motives into multi-dimensional reasons. All the antecedent's factors are supported in this study except one antecedent of attitudinal beliefs (i.e. knowledge). The findings in this study offer the significant antecedents that can be utilized in studying halal cosmetic and in understanding the specific factors which can influence individual intention to purchase halal cosmetic products. The significant antecedents reported in this study might be used in determining the consumption behavior of other non-food halal products (i.e. halal pharmaceuticals).

Sixth, most previous research has focused on TRA and TPB. To the researcher's knowledge, this study is one of the first that is using Behavioral Reasoning Theory in the halal domain in general and halal cosmetic domain in particular. In addition, using Behavioral Reasoning Theory in other culture settings like Pakistan has also contributed to extending the existing body of knowledge associated with this theory. Moreover, with the diverse sampling frame and products (i.e. halal cosmetic), the findings of this study support the robustness of the behavioral reasoning theory based on its ability to predict context specific intention and usage behavior. Therefore, this study is an attempt to bridge this gap in the literature.

Finally, another contribution of this study is it explain the halal consumption behavior from Muslim Generation Y point of view. Current literature on non-food halal products tends to neglect the voice of this specific market segment. This study provides valuable insights into non-food halal context (e.g. halal cosmetic) by exploring a narrower group of generation Y consumers such as college-aged consumers. Moreover, the current research on food and non-food halal products are mostly from Malaysian context. There is a lack of related research on food and non-food halal products in other Muslim populous countries such as Pakistan. Hence, this study overcomes this gap in the literature.

The results of this study also suggest a significant contribution in terms of methodological point of view. Firstly, previous studies on Islamic marketing literature have mainly used SPSS and or AMOS, but to the best knowledge of the researcher, very few have used SmartPLS-SEM 3.0 to produce results by using latest features (e.g. HTMT). Additionally, a large body of previous research on food and non-food halal products such as halal cosmetic in the consumer behavior

domain uses non-probability sampling techniques. Non-probability sampling techniques have many drawbacks such as they produced biased results, misrepresentation of data and results through non-probability sampling techniques cannot be generalized. This study does not suffer from this limitation.

In addition, Souiden and Rani (2015) suggest that in order to validate the generalizability of religiosity measurement, it needs to further cross-validation of the religiosity measurement in non-Christian context. Since the religiosity measurement has been mostly validated in Christian context, this study contributes to the methodological aspect by providing the reliability and validity of the religiosity scale (RC 10) in a Muslim context in general and halal cosmetic context in particular. While no researcher thus far has adapted the RC10 as a measurement device for religiosity construct in halal cosmetic context.

5.4.2 Managerial Implications

This study also presents practical insights for industry. Some of the relevant practical implications have been discussed all the way in the discussion of the finding based on hypotheses and research questions posited in this study. The results of this study provide the understanding of the factors in driving the consumer's intention towards halal cosmetic products. The relatively low of intention level has provided the insight and shed light on potential avenues of developing the action plan for promoting the halal products towards increasing the consumption level. It also offers a vast opportunity for halal cosmetic manufacturing companies to increase the consumer's awareness and knowledge about halal cosmetic products which affect their intention as discussed in the previous section. Since the increase in the consumer's awareness or knowledge has been

proved might increase their intention towards halal cosmetic products, therefore, marketers should use the results from this study in order to increase the halal cosmetic consumer's knowledge about halal cosmetic products. As the demographic variables indicate that college-aged students are the most targeted group for halal cosmetic products, this offers great opportunities for halal cosmetic manufacturing companies to understand deeper the reason of potential consumer's behavioral intention to purchase halal cosmetic products. The effects of demographic variables on behavioral intention provide a clear direction for practitioners to design their promotion strategies which can fit into this specific market segment. Based on the result of this study, practitioners can narrower segmentation of generation Y segment.

Moreover, the finding in this study also notes that in order for individuals has a positive intention towards halal cosmetic products, positive attitude towards an intention to purchase halal cosmetic products should take place earlier before consumption behavior. The findings also suggest that the two antecedents of attitude namely health consciousness and environmental consciousness play a significant role in building a positive attitude towards an intention to purchase halal cosmetic products. To achieve that, halal cosmetic manufacturing companies need to emphasize on the benefit of halal cosmetic products, keep informing and educating consumers and increase the products knowledge continuously. The companies need to highlight the health benefits (e.g. use of pure ingredients, free from harsh impurities, prevent skin damages or allergic reactions) that consumers can gain from using the halal cosmetic products. To build a positive attitude, marketers need to persuade and convince the consumers that using of halal cosmetic products can meet consumers interest and fit well with their Islamic lifestyles. This will lead to building a positive attitude towards an intention to purchase a halal cosmetic product which in turn will influence their

intention to purchase halal cosmetic products and then actual purchase. The result apparently gives an indicator to halal cosmetic manufacturing companies to inculcate a positive attitude towards influencing targeted consumers to purchase halal cosmetic products.

The findings of this study also declare that individual's intention to purchase halal cosmetic products is influenced by the closest people surrounding to them (e.g. family members) and mass media. The reasoning of subjective norm namely (family and mass media) influence individual's intention to purchase halal cosmetic products. Halal cosmetic family as the spoke persons or testimonials is deemed appropriate because college-aged students manufacturing companies might consider family advertising strategy for developing positive word of mouth and positive remark. Since endorsement from this group affects the individual's decision, using tend to follow the people who are closest to them in making decision towards an intention to purchase halal cosmetic products. As declared (A. S. Al-Ajam & Md Nor, 2015; Bonne et al., 2007) by in collectivistic societies such as Pakistan, individuals have a tendency to perceive themselves as interdependent with their group and have a tendency to strive in-group as opposed to individual goals priority. The significant effect of media suggests that halal cosmetic manufacturing companies should be focusing on an intensive media campaign through suitable mass media channels such as broadcast media, digital media, outdoor media, print media, event organizing and public speaking to increase reference groups awareness and knowledge regarding the benefits of using halal cosmetic products that leads towards in enhancing subjective norm and stimulating the intention to purchase halal cosmetic products.

Self-efficacy and government support have shown a significant effect on individuals control beliefs and intention to purchase halal cosmetic products. In building the consumer's self-confidence halal cosmetic manufacturing companies should organize family contests and used product sampling marketing strategies to eliminate any doubt or hesitation they might have. In addition, the halal cosmetic manufacturing companies can offer new strategies by requesting the Pakistani government to issue laws and legislations, for validating halal status to purchase halal cosmetics products. Because authentication of halal certification and validating halal status is the core concern of Muslims in purchasing halal products.

Last, but not the least, the statistical results obtained in this study showed that religiosity has a significant effect on their behavioral intention towards halal cosmetic products. Halal cosmetic manufacturing companies need to consider religiosity factor in their marketing strategies and should not consider these strategies that are not according to Islamic principles. Such as un-Islamic pricing strategies (i.e. price fixing strategy, price war strategy and price collusion strategy), sexual advertising strategies (i.e. physical attractiveness, sexual behavior, sexual referents and sexual embeds), deceptive advertising strategies (i.e. false coloring strategy, fillers and oversized packaging strategy, omitting information, photo retouching and manipulation of terms), bait and switch strategies and planned obsolescence strategies etc.

5.5 Limitations and Suggestions for Future Studies

Despite the research presents insightful findings and contributed to both theoretical and practical evidence, but there are some limitations need to be addressed. First, the use generation Y as a sample of the study is limited to generalize this finding to non- generation Y population. Therefore,

future research is needed to consider across more than generation Y population by replicating the study intention to purchase halal cosmetic products. On top of that, the college-aged student's sample used in this study is limited to the majority of people aged in the 23 and below. The study samples inadequately represent all cosmetic users and cannot be generalized to all age groups. Thus, this study proposes that future studies enlarge the sample population by including more representative sample consisting of various age categories in ensuring generalizability of the results.

Second, limitation of this study lies in the high number of male respondents (62%). This leads to some biasness issue on behavioral intention. Therefore, the results of this study should be interpreted carefully. Hence, it is recommended for other studies to use a larger sample size and different population of cosmetic users for future studies.

Thirdly, this study is carried out in Pakistan. The results might be different with the studies in other countries and cultures. Hence, further studies should be carried out to compare the results of this study with other countries. Consumers from other countries might have different cosmetic buying consumption pattern and also any other important factors that influence the intention to purchase nonfood halal products (halal cosmetic).

Fourth, as religiosity is a personal matter, to have an in-depth picture of consumers religious values and motivational factors, the qualitative/mixed methods studies are suggested such as interview method to replenish the flaws of problem statement of this study and help offset the weaknesses of using quantitative and qualitative methods individually (Belk, 2008). For instance, arranging an outdoor interview and observation on Gen Y consumers are needed, because open-ended questions

can collect more real-time and detailed information than close-ended questions. Open-ended questions have greater potential to uncover useful information. Also, they provide clues into communication skills and thought processes to effectively investigate the behavior of Gen Y consumers (R. Kumar, 2014). Besides, human observation method provides the opportunity to watch the respondents' behaviors towards personal care products.

Finally, in this study, the time horizon is one of the methodological limitations. The data for this study were collected at one time (a cross-sectional study), thereby providing only a snapshot of the population studied. Collecting data at another time from the same population might have produced a significantly different result, even though cause-and-effect relationships are developed based on theoretical or hypothetical predictions and related studies conducted in the past. Consequently, future researchers could conduct a similar but longitudinal study, which would allow stronger cause-and-effect relationships to be developed. Moreover, given that this study focuses on the cosmetic buying behavior of all cosmetic product categories such as skincare, fragrance, makeup, hair care and toiletries, future studies also may concentrate on a single type of product category to dig into deeper understanding on the buying behavior of specific halal cosmetic products.

5.6 Conclusion

The major aim of the present study is to investigate the factors that could influence halal cosmetic products purchase intention in the context of Pakistani students. A total of 529 questionnaires were used for data analysis, using PLS (SEM). There are 10 constructs with significant statistical support and one unsupported relationship in this study. Firstly, direct statistical support by antecedents of halal cosmetic products purchase intention are attitude, subjective norm, perceived behavioral control and religiosity in terms of interpersonal religiosity and intrapersonal religiosity. Secondly, direct

significant antecedents of attitude towards halal cosmetic products purchase intention are health consciousness and environmental consciousness. Thirdly, direct significant antecedents of subjective norms towards halal cosmetic products purchase intention are family influence and mass media influence. Fourthly, direct significant antecedents of Perceived behavioral control towards halal cosmetic products purchase intentions are self-efficacy and government support. Therefore, all the direct relationships are supported, except knowledge on attitude towards halal cosmetic products purchase intention.

In fact, attitude, subjective norm, perceived behavioral control and religiosity (interpersonal and intrapersonal) explain approximately 61% of the variance in behavioral intention. The total variance on the behavioral intention explained was higher the one reported by other researchers (N. U. Ansari & Mohammed, 2015) in the same context and same settings. Thus, it can be concluded that the main beliefs attitude, subjective norm, perceived behavioral control and religiosity (interpersonal and intrapersonal) are strong predictors of student's intentions to purchase halal cosmetic products.

As expected, reasoning approach of the main global motives (i.e. attitude, subjective norm, perceived behavioral control) provides more insights on the specific factors that influence the behavior. Based on the results of the study, significant contribution to theoretical, methodological and practice is highlighted. Eventually, this study has identified the limitations of the study and proposes future research direction as concluding remark.

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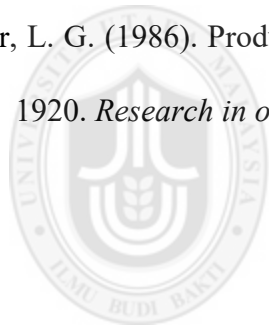
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APPENDIX 1

LETTER FOR QUESTIONNAIRE

Questionnaire survey on modeling the antecedents of consumer intentions to purchase halal cosmetics in Pakistan

Dear Respondent,

I am Saqib Ali a doctoral student in the college of business (COB), the University Utara Malaysia (UUM) under the supervision of Dr. Fairol Bin Halim and Dr. Norzieiriani Bt. Ahmad; I am currently working on a doctoral dissertation regarding “The Antecedents of Consumer Intentions to Purchase Halal Cosmetics in Pakistan: Using Behavioral Reasoning Theory”.

The purpose of this study is to determine driving factors that are significant in explaining consumer intention towards halal cosmetic in Pakistan. I would appreciate if you could spare some time and thought in completing this questionnaire. I hope that you would co-operate in completing the questionnaire with the best of your ability. This questionnaire consists of two sections. Section one consists of the interest of this study which is the factors that influencing halal cosmetic purchase intention in Pakistan. Section two consists of questions about your demographic profile. Your responses will be treated as confidential and used for research purposes only.

A short description of halal cosmetic products “*Product that must not have any human parts or ingredients thereof; not contain any animal forbidden to Muslims or are not slaughtered according to Shariah law; no genetically modified organism (GMO) which are decreed as najis; no alcohol from alcoholic drinks (khamar); no contamination from najis during preparation, processing, manufacturing and storage; and safe for consumer*”.

Thank you for your willingness to participate in this study

Best regards

The researcher: Saqib Ali
Ph.D. Marketing Program (Universiti Utara Malaysia)
Saqib.ch44@yahoo.com

Date:

If you like to know the results of study, please provide your email address

APPENDIX 2

QUESTIONNAIRE

The following questions are to find out the degree of your agreement or disagreement to statements. Please respond to each statement and designate your level of agreement or disagreement by choosing an appropriate number pertaining to one answer on the scale that best describes your opinion.

Part 1: Please read the following statements and circle only one number which best describes your opinion.

Each number has the following meaning:

1	2	3	4	5	6	7
Strongly disagree	Disagree	Disagree somewhat	Neutral	Agree somewhat	Agree	Strongly agree

		1	2	3	4	5	6	7
1	I am willing to pay more for cosmetic products with an authentic halal logo.							
2	I am willing to wait longer to buy cosmetic products with an authentic halal logo							
3	I am willing to shop around to buy cosmetic products with an authentic halal logo.							

4	I am willing to travel long distances to buy cosmetic products with an authentic halal logo.							
5	I intend to purchase halal cosmetic products in the future.							
6	Using halal cosmetic products is a good idea.							
7	I like the idea of using halal cosmetic products.							
8	Using halal cosmetic products is a pleasant idea.							
9	Using halal cosmetic products is an appealing idea							
10	I feel very knowledgeable about halal cosmetic products.							
11	I have enough knowledge about halal cosmetic products to give others advice about it.							
12	Others often seek my advice on halal cosmetic products.							
13	I feel very confident about what products are forbidden by Islam when buying halal cosmetic products.							
14	I reflect about my health a lot.							
15	I am very self-conscious about my health.							
16	I am alert to changes in my health.							
17	I am usually aware of my health.							
18	I take responsibility for the state of my health.							
19	I am aware of the state of my health as I go through the day.							
20	I feel frustrated and angry when I think of cosmetic industries that conduct business by polluting the environment.							
21	When two cosmetic products are similar, I tend to select the one that harms the environment less, even though it is more expensive.							

22	If the cosmetic products sold by the firms seriously damage the environment, I will refuse to purchase them.							
23	When purchasing cosmetic products, I always select the ones with environmental certification, even though they are more expensive.							
24	I follow the key points of recycling and classify recycled waste at home.							
25	I often purchase products that are over-packaged.							
26	I am concerned about my actions to improve the environment.							
27	I am often concerned about and absorb environmental knowledge and information.							
28	People who are important to me think that I should use halal cosmetic products.							
29	People whose opinions I value think I should use halal cosmetic products.							
30	People who are close to me think that I should use halal cosmetic products.							
31	People who influence my decisions think that I should use halal cosmetic products.							
32	My family thinks that I should use halal cosmetic products.							
33	I will have to use halal cosmetic products if my family has already used it.							
34	I have to use halal cosmetic products because my family thinks I should use it.							
35	Generally, I want to do what my family thinks I should do.							

36	The mass media suggest that I should use halal cosmetic products.							
37	The mass media urge me to use halal cosmetic products							
38	Mass media is full of reports, articles; TV, radio, newspapers, and internet suggest that I should use halal cosmetic products.							
39	Mass media and advertising consistently recommend that I should use halal cosmetic products.							
40	I would be able to purchase halal cosmetic products.							
41	I have the resources to purchase halal cosmetic products.							
42	I have the knowledge to purchase the halal cosmetic products.							
43	I have the ability to purchase the halal cosmetic products.							
44	Whether or not I purchase halal cosmetic products is entirely up to me.							
45	I am confident that I can purchase halal cosmetic products regularly.							
46	I am very sure that I would be able to purchase halal cosmetic products next week.							
47	I am certain that I will be able to refrain myself from purchase cosmetic products that are not halal.							
48	If I wanted to, it would be very easy for me to purchase halal cosmetic products regularly.							

49	I think government endorses halal cosmetic products.								
50	I think the government is active in setting up facilities to enable halal cosmetic products.								
51	I think the government has good regulations laws and policies for halal cosmetic products.								
52	I think government promotes the use of halal cosmetic products.								
53	I make financial contributions to my religious organization.								
54	I enjoy spending time with others of my religious affiliation.								
55	I keep well informed about my local religious group and have some influence in its decisions.								
56	I enjoy working in the activities of my religious organization.								
57	My religious beliefs lie behind my whole approach to life.								
58	I spend time trying to grow in understanding of my faith.								
59	It is important to me to spend periods of time in private religious thought and reflection.								
60	Religious beliefs influence all my dealings in life.								
61	Religion is especially important to me because it answers many questions about the meaning of life.								
62	I often read books and magazines about my faith.								

Part two: Demographic profile

Please answer the following questions about yourself and your usage of Halal cosmetics. Your responses will be used for classification purposes only. (Please ✓ only one answer)

1. What is your gender?
 Male Female
2. What is your age?
 18-24 25-30
 31-36 37 and older
3. Marital status
 Single In a relationship
 Married
4. What is your level of degree?
 MBBS BDS
5. Residential Place
 Urban Rural
6. How much monthly money you spent on cosmetics (including Skincare, Facial care, Makeup, Fragrance and toiletries products etc.)
 Less than 1500 Rs 1500 Rs - less 3000 Rs
 3000 Rs - less 4500 Rs 4500 Rs and Over
7. The frequency of buying cosmetic products?
 Once a month Twice a month
 Three times a month More than three times a month



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