A Symbolic Interactionist Approach to Consumer Behaviour

By

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Declaration of Originality

I certify that this thesis does not incorporate without acknowledgement any material previously submitted for a degree or diploma in any university; and that to the best of my knowledge and belief it does not contain any material previously published or written by another person except where due reference is made in the text.

Signed: _____ On: _____/____/_____

Ethical Approval

Approval to conduct this research was granted by University of South Australia's (UniSA) Human Research Ethics Committee and the research protocol (25025) meets the requirements of the National Statement on Ethical Conduct in Human Research in Australia.

Referencing style

Harvard-UniSA style is used in this thesis for in text citations and references.

Publications

Some of the findings of this PhD can be found in following papers:

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Abou Bakar, Lee, R & Rungie, C 2012b, 'The Use of Religious Symbols on Packaging to Influence Product Preference and Rating', *2nd Global Islamic Marketing Conference (GIMC),* Abu Dhabi, UAE.

Abou Bakar, Lee, R & Rungie, C 2013, 'The effects of religious symbols in packaging on Muslim consumer responses', *Australasian Marketing Journal,* vol. 21, no. 3, pp. 198-204.

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Abstract

Despite growing scholarly interest in the interplay between religion and consumer behaviour, research regarding Muslim consumers is still scarce in main stream literature. While past studies have recognised the influence of cues (symbols and verbal cues) in marketing communications, most have ignored the role of religious symbolic cues. Drawing on symbolic interactionism theory, this empirical study examines how the presence of religious symbolic cues on product packaging may influence responses of Muslim consumers. Further, this thesis examines how influence may vary between products of low versus high symbolic values, and across consumers of varying level of religiosity.

An elicitation survey (n=97) identified 10 symbols, 10 high-symbolic and 10 low-symbolic value products. These findings were validated by discussions with marketing scholars and practitioners. After pre-test and validation of questionnaires, four studies examined role of religious symbolic cues on product packaging and their influence on Muslim consumer behaviour. Recognising reported discrepancy between consumer attitude and behaviour, the studies tapped both types of consumer responses by using discrete choice experiments and survey design. While the choice of respondents served as a proxy of behaviour, attitudes were measured by Likert type scales. The datasets concerning respondents' choice were analysed using choice modelling, a method rarely used in consumer behaviour studies and never used before for studying such symbolic cues as product packaging attributes. Similarly, the datasets concerning consumer attitudes were analysed using structural equation modelling to test hypotheses developed on the basis of extant literature.

Four studies make up this thesis. Study 1 which was conducted in Malaysia (n=100) found that the presence of a religious symbol on product packaging influenced respondents' choice (behaviour) as well as their rating (attitude) for food and non-food products. The respondents were more likely to choose products with a religious symbol on the packaging, and they also rated the products more positively. To further generalise the results, Study 2 was conducted in Pakistan (n=245), where the results similarly showed that the presence of a religious symbol positively influenced the behaviour of respondents. However, the ratings were not significantly different between the presence and absence of symbol on product packaging. In

order to investigate the effects of verbal cues (local versus a foreign language), Study 3 was conducted in Malaysia (n=200) and Pakistan (n=480) using their local languages (Bahasa Malay and Urdu respectively) and English as a foreign language. The study found an overall inclination of respondents towards the use of local language, although the effects were not statistically significant. Finally, Study 4 conducted in Pakistan (n= 250), investigated differential effects of respondents' intrinsic and extrinsic religiosity on their attitude towards products with low versus high symbolic values. The findings showed that intrinsically religious consumers possessed more positive attitude towards the use of symbol on products of high symbolic-value, whereas extrinsically religious consumers possessed more positive attitude towards low symbolic-value products.

Academic researchers and practitioners equally strive to understand the promotional and other product related attributes that are important to consumers. This research attempts to guide the marketing community in developing effective marketing communication, particularly packaging design, to target Muslim consumers. Applying symbolic interactionism theory to Muslim consumer behaviour, the thesis highlights the important role that religious symbolic cues can play in packaging design for products in Islamic markets. It extends research regarding the communicative power of product packaging especially at point of purchase, as allocation of financial resources is diverted from traditional promotional tools to point of purchase elements. However, marketers need to be cognisant that the influence of religious symbolic cues on product packaging varies across product types as well as consumer religiosity level. This means that marketers should not blindly place religious symbolic cues on packaging without first understanding the contextual environment – product type and target segments – that they operate in. This thesis also highlights that product packaging is processed differently from advertising. Compared to symbolic cues, verbal cues just communicate the objective information about the product and provide less scope for self-identity and self-portrayal. Hence, there is little downside if product information, such as price and ingredients, is communicated in English in Islamic markets. This important finding will guide marketers and package designers in effectively selecting the type of cues to use on packaging.

Another important contribution is the findings about the respondents' willingness to pay (WTP) for products with religious symbolic cues on their packaging. Past research mostly focuses on the general influence of some marketing stimuli on marketing communications, whereas this study attempts to quantify the incremental monetary value that comes from adding a religious symbolic cue on a product packaging. Using the WTP estimation, managers can then compare the financial costs involved in designing or changing a product packaging with the incremental benefits that the changes bring.

Future research can extend this thesis in several ways. An obvious avenue for future research is to replicate this study in other Muslim countries. As religious symbols may vary in sacredness, future studies should compare the efficacy of different symbols in marketing communication. Prior research has demonstrated the differential effects of country-of-origin and local versus foreign products. An interesting future research avenue would be to understand and compare consumer responses to the use of religious symbolic cues with foreign versus local brands.

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List of abbreviations

AMA	American Marketing Association
ANOVA	Analysis of variance
CFA	Confirmatory factor analysis
CPI	California Psychological Inventory
DCE	Discrete choice experiments
DVD	Digital video discs
GFI	Goodness-of-Fit Index
IAT	Implicit association test
IIA	Independence from irrelevant alternatives
IID	Independently and identically distributed
ISO	International Standard Organisation
LLR	Log likelihood ratio
MLE	Maximum likelihood estimation
MMPI	Minnesota Multiphasic Personality Inventory
NFI	Normed fit index
OLS	Ordinary least square
RMSEA	Root mean square error of approximation
RP	Revealed preference
RUT	Random utility theory
SEM	Structural equation modelling
SIT	Symbolic Interactionism Theory
SP	Stated preference
SPSS	Statistical Package for Social Sciences
UAE	United Arab Emirates
VE	Variance extracted
WTP	Willingness to pay

PART I

INTRODUCTION

A Symbolic Interactionist Approach to Consumer Behaviour

1. Background and research objectives

Often alluded to as the 'third billion' (Chen 2010), the vast Muslim consumer market holds considerable interests for practitioners and academic researchers. Despite growing interest in the interplay between religion and consumer behaviour, research regarding Muslim consumers is still scarce in main stream literature. Against this backdrop of growth and potential of the Muslim consumer market, four research studies drive this dissertation. In order to explain and distinctly position the four studies within current research, the following paragraphs first provide an overview of this chapter's layout.

The first section (1.1) lays the theoretical grounding by justifying the use of Symbolic Interactionism Theory (Mead 1934; Blumer 1969; Burbank & Martins 2009) to explain Muslim consumer responses to religious symbolic cues[1] on product packaging. Later, while the first study (Section 1.2) asks whether the presence of symbols on product packaging may influence Muslim consumer behaviour, the second study (Section 1.3) raises the research question whether the influence of symbols may differ across different countries of the Muslim world due to different labelling laws.

A common theme in these two studies is the use of religious symbols on product packaging. However, the two countries in this thesis context (Malaysia and Pakistan) possess similarities as well as the diversity, particularly in their local languages. Like symbols, verbal cues can play an important role in influencing consumer behaviour. Hence, the research question in third study (Section 1.4) concerns whether the use of verbal cues on product packaging in local languages

[1] Throughout this thesis, *symbolic cue* is an umbrella term that encompasses both symbols and verbal cues. Symbols are pictorial images whereas verbal cues are based on the local languages of contextual countries in this research. As explained later in the literature review (p.60), both symbols and verbal cues can have religious or cultural connotations.

(Bahasa in Malaysia and Urdu in Pakistan) versus those in English may affect Muslim consumers differently. In essence, the third study highlights how Muslim consumers may process product packaging differently from advertising. The last study (Section 1.5) develops the question regarding consumer responses to symbols on packages of high and low symbolic-value products, and how the responses may differ according to individual religiosity. Combined, the four studies attempt to shed light on Muslim consumer behaviour, an area that remains largely under-researched to date, and provide the theoretical and managerial contributions of this thesis (Section 1.6). In order to shed light on the relevance of the contextual background, Section 1.7 provides a brief overview of the Muslim world and Muslim consumers. Finally, Section 1.8 concludes with a chapter outline of this thesis.

1.1 Applying Symbolic Interactionism Theory to consumer behaviour

Marketing researchers have long linked symbolism to consumer behaviour (Ekinci, Sirakaya-Turk & Preciado 2013; Leigh & Gabel 1992; Mick 1986). Early studies in the 1950s have postulated that products offer symbolic value and benefits to consumers (Gardner & Levy 1955; Levy 1959). Like functional attributes and value of products, consumers may make choices based on the symbolic value of products. Later researchers endorsed the fact that consumers derive symbolic meaning from marketing communications. For example, Mick (1986) referred to the consumer world as a web of meanings among consumers and marketers woven in cultural space and time. This view of the consumer world identifies three major aspects in the consumer world, the first being that there are marketers who promote or advertise products. Second, the products are promoted by highlighting the symbolic meaning to consumers, and finally, the products may mean different things to different consumers depending on their cultural background.

Marketers have explored different ways by which they can attach and highlight the symbolic meaning of certain products. One of the means to do so is by celebrity endorsements in advertisements. Research, for example, suggests that appropriate use of celebrities in marketing communications can improve brand image and influence consumer purchases (Fleck, Korchia & Le Roy 2012; Hakimi, Abedniya & Zaeim 2011).The idea is that celebrities may belong to a particular

reference group, whereby consumers have certain associations attached to that celebrity and reference group. When the celebrity endorses a product, the associations and meanings are transferred from the celebrity to the product. As a meaning transfer process occurs with a celebrity endorsement, the meaning transfer influences consumer behaviour. Finally, consumers purchase that product to symbolise their affiliation and identification with that celebrity and the adoption of the symbolic meaning from that product. The process of meaning transfer is theorised by McCracken (1986) and was later empirically tested by researchers (e.g., Langmeyer & Walker 1991; Newman, Diesendruck & Bloom 2011; Wei & Lu 2013). Thus, this thesis postulates the influence of symbolic cues on consumer behaviour and attitudes.

To better explore the underpinnings for symbolism in consumption, researchers have drawn on the SIT (Henley et al. 2009; Leigh & Gabel 1992). According to this theory, individuals in a society are social beings. Human beings learn the objects around them and give them meanings according to their interactions with the environment. In such social interactions, an individual's role and situation or context are important factors to generate an appropriate response. Consequently, human beings do not respond to the situation or event as it happens but on the basis of their interpretation and definition of that situation or event (Burbank & Martins 2009). The behaviour of the individual mainly depends on the interpretation and the context of behaviour. This theory is generally applied to explain different aspects of sociology. The theory stems from psychology and social psychology, where human behaviour is shaped by the individual self as well as by others in the society. This understanding of social learning and interpretation has significant implications for human behaviour. Likewise, symbolism is an expression of a consumers' self-image or self-identity. Therefore, researchers extended the SIT to explain symbolic consumption and proposed that the theory may explain consumer behaviour, in that consumers associate symbolic meanings with products that they consume (Leigh & Gabel 1992; Solomon 1983). Researchers contend that consumers often structure and portray their self-concept and behaviour via the subjective experience that they derive from consuming products (Chernev, Hamilton & Gal 2011; Solomon 1983). These studies, however, are primarily conceptual with a little or no empirical evidence to the phenomenon.

Conventional marketing considers consuming products as a response to some underlying needs and the functional attributes of the products. Overall, research into human motivations to purchase products can be grouped into two domains. One is the rationale and economic model of consumer behaviour that suggests that consumers make purchases on the basis of rationality and they evaluate the product's functional attributes for their purchase decisions (Schiffman & Kanuk 1994). For example, the efficient mileage of a car is the functional attribute. Other researchers, however, suggest that consumers are not always rational in their purchases; they can purchase a product to express self-identity and emotions (Holbrook 1980; Holbrook & Hirschman 1982). Accordingly, the information processing and decision-making processes depend on the nature of the product. For example, consumers can express their self-identity by owning a particular car brand. The SIT focusses on how products may serve as priori stimulus to consumption behaviour (Solomon 1983). This means that consumers may choose products depending on what the products represent to them and to others in their reference groups, rather than primarily on the product's functionalities and performance. The chosen product then serves as a channel or medium for consumers to portray themselves to others based on the symbolic meaning that society attaches to the product. Keeping in view the above discussion, and as it is detailed in the literature review, the SIT is a useful theoretical framework for this thesis.

1.2 Religious symbols and marketing communication

The first study in this thesis concerns the use of symbols on product packaging and consumer responses to such use. Just like the use of celebrities in marketing communication affects product image and consumer purchases (Newman, Diesendruck & Bloom 2011; Wei & Lu 2013), this thesis postulates the influence of symbolic cues on consumer behaviour and attitudes. Indeed, organisations develop product associations by using celebrities for product endorsement and other marketing communications. This phenomenon demonstrates the role of such celebrities in the transfer of symbolic meaning to consumers. Likewise, the associations attached with symbolic cues can be transferred to products if symbolic cues are presented. Hence, an observation of advertisements shows how marketers use symbolic cues to communicate symbolic meanings. The use of symbolic cues in

marketing communication, via advertising or product packaging, may add to the symbolic value of the product. Combined with this phenomenon, consumers will purchase the product communicated by using a symbolic cue to express their self-concept to others, along with associating themselves with that specific symbolic cue. In this communication process, it is necessary that the sender (marketer) and the receiver (consumer) share a common understanding and meaning of the symbolic cues to develop desired associations. For example, in a similar culture, symbolic cues hold meaning as the people in that culture have defined these symbolic cues. Research in this area has identified symbolic cultural aspects of consumption (Chattaraman & Lennon 2008; Lindridge, Hogg & Shah 2004).

Practitioners have long used religious cues to help market their products (Gökariksel & Secor 2010; Maguire & Weatherby 1998; Mallia 2009; Marchand 1985; Moore 2005; Story 2007; Taylor, Halstead & Haynes 2010). For example, Al-Oyan and Karanede (2000) analysed print advertisements in the United States (US) and Arab countries, and reported that Arab advertisements usually pictured women in long dresses and mostly with the products that were relevant to them, such as cosmetics and fashion. The authors commented that the findings are consistent with the values of the Islamic culture, which require modest dressing for women. Similarly, Marchand (1985) analysed advertisements in the US media prior to 1950s and observed the frequent use of religious notions and icons in advertisements. Indeed, Mallia (2009) contended that religious cues provide an opportunity to be noticed in this age of clutter. Yet, little academic research has attempted to shed light on this cross-disciplinary relationship between religiosity and consumer behaviour (Mokhlis 2009; Taylor, Halstead & Haynes 2010). This scarcity has resulted in occasional consumer backlash caused by low knowledge of the marketers on appropriate use of such cues. For example, Sony PlayStation published an advertisement to celebrate its tenth anniversary in 2005 that offended Catholics and the Vatican. The advertisement was pulled after complaints from the Vatican ‘(Sony and Paddy Power ads upset Catholics 2005). For more discussion and examples, see literature review section (p 73-75).

Further, despite some research on the use of religious cues in advertising (e.g Henley et al. 2009; Mallia 2009), to the author’s knowledge, no studies have examined religious cues on product packaging. Advertising and packaging may operate differently in influencing consumers, as product packaging plays a key role

at the point of purchase (Sharp 2010; Underwood 2003). Product packaging influences purchases at the point of purchase and a study showed that above 70 per cent of in-store decisions in supermarkets are made at the point of purchase (PoPAI 2001). Moreover, Kapferer (1995) suggested that with fast moving consumer goods, consumers are less involved and they often glance across the shelves. Consequently, they may simply base their choices on implicit cues, such as symbols on packaging which require little elaboration (Herm 2011). Indeed, researchers have argued for the importance of symbols in brand choice because consumers are often under time pressure and give limited attention when choosing among competing brands (e.g. Herm 2011; Pieters & Warlop 1999).

Symbolic cues can be symbols (images) or verbal cues (language) (details in literature review). The literature review also provides detail and examples regarding the use of religious cues in marketing communications. The frequent and greater use of religious cues in marketing communication can be attributed to intense competition and that these cues cut through the clutter and catch consumer attention (Mallia 2009; Marchand 1985). However, despite the greater use of religious cues in marketing communication, the research so far has not tapped extensively into the impact of religious cues on product packaging. While there are limited studies in this area (e.g., Taylor, Halstead & Haynes 2010), these studies are set in western contexts and do not concern Islam and Muslim consumers. Further, whereas, as explained in the research context, Islam is a way of life for Muslims and influences their consumption practices. Therefore, the first research question (RQ1) for this thesis is:

RQ1: How does the presence of symbols on product packaging influence Muslim consumer perceptions and choice of products?

1.3 Muslim countries with different legislations

To further generalise the impact (if any) of symbols on product packaging on Muslims around the globe, the second research study concerns an investigation in another Muslim country. Muslims are in majority in about 50 countries in the world and 62 per cent of all Muslims reside in the Asia-Pacific region (Pew Forum 2012). The common link among all Muslims around the globe is their religion, Islam. However, along this harmony and cohesiveness of faith, different Muslim countries have differences in their cultural and demographic compositions. Therefore, country

wise, legislation is based on the religious teachings as well as the demographic structure of these countries. Accordingly, labelling practices and laws can differ in different countries. For example, in some countries sellers may have the choice of disclosing information to consumers, whereas in some other countries the government may mandate organisations to put certain labels on products to disclose specific information. In mandatory disclosures, organisations need to disclose certain product attributes in the prescribed format. In fact, the label of the product certifies that the product has specific attributes. For example, if a product has an environmental or eco label, it shows how environmental a product is and how its usage can affect the environment. Hence, such a label can influence the purchases and choices of consumers who are concerned about the environment. Similarly, Muslim consumers are guided by their religion and prefer Halal (permitted) products (Bergeaud-Blackler & Bonne 2007).

Halal is a complex phenomenon that involves the product itself, process, operators and supply chain (detailed in literature review). In some countries, like Malaysia, the population is diversified; products in retail stores might not all be Halal. Therefore, the governments have regulated the market operations and have made it mandatory for organisations to put Halal labels on products. In these countries, the presence of Halal symbols assists with product purchasing. In such countries where these laws exist, Halal certifying bodies issue certificates to the organisations, as these bodies verify that there is nothing Haram in the ingredients of the product, and that the product is processed in an appropriate way as advised by the Islamic teachings. Consumers in these countries may be more attentive towards the product package to check the Halal label and their response may be more skewed towards preference for religious symbols on product packaging. An important objective of marketing research is to find empirical generalisations, where the findings can be applied to the population of interest. Therefore, the research is extended to Muslim countries, where by law, every product to be sold in retail stores should be a Halal product and it is not mandatory for the organisations to put Halal symbols on their product's package. In these countries, consumers may not be that attentive to product packaging compared to in the previously mentioned countries. Therefore, the second research question (RQ2) is as follows:

RQ2: Comparing Muslim consumers in Halal-symbol legislated versus non-legislated countries, how does the presence of symbols on product packaging influence perceptions and choice of products?

1.4 The use of language on product packaging for bilingual Muslim consumers

The third study concerns the use and influence of verbal cues stemming from the local language of the people. Like symbols, verbal cues can have religious and cultural connotations and are important symbolic cues. Consumers consider language and words of local languages and symbols and as a sign of their culture and heritage. The use of verbal cues in the form of the local language can evoke positive associations as compared to the use of foreign language. Therefore, researchers have established the symbolic value of local language for individuals (Koslow, Shamdasani & Touchstone 1994). Marketers strive to understand the use and influence of local (or foreign) language in marketing communications. In particular, for Muslim consumers, language (Arabic) is identified as a sign of religious community (Jaspal & Coyle 2010). The local languages in which individuals attend religious ceremonials possess the power to evoke cultural and religious identity. For example, Urdu is a national language in Pakistan and can have positive religious associations for Pakistani consumers. More importantly, this language is mainly derived from Arabic and Persian. Urdu is written in right to left in an extension of the Arabic alphabet.

Considering the concept that local language is a sign of culture and heritage, an important question is whether marketers should use such verbal cues in marketing communication. Moreover, the population of different countries is becoming more diversified and the choice of language as a verbal cue in marketing communication is an important decision for local companies as well as multinational companies, especially in bilingual markets. Hence, researchers in marketing communications have examined the use and influence of language in advertising (e.g., Krishna & Ahluwalia 2008; Luna & Peracchio 2001, 2005b, 2005a). Specifically, an established research stream is about the comparison of English as a standard language versus the local language in different countries (Gerritsen et al. 2007; Krishna & Ahluwalia 2008; Luna & Peracchio 2001, 2005b; Puntoni, De Langhe & Van Osselaer 2009).

However, research so far in this area has two main issues. First, the overall findings are inconclusive and local language is found to have different associations in different studies compared to the use of foreign language. For example, while a few studies show foreign language (English) to be associated with modernity (e.g., Krishna & Ahluwalia 2008), a recent study found that local language (Arabic) can also be associated with modernity (Nickerson & Camiciottoli 2013). Second, the studies in this area so far are limited to advertising context and only one study (Cyril DeRun & Sien Fah 2006) has investigated the influence of language on product packaging. Product packaging, however, is an important marketing communication vehicle, processed differently than advertising by consumers (literature review for details). Moreover, this author found only one published study concerning Muslim consumers (Nickerson & Camiciottoli 2013) in advertising. Therefore, the third research question (RQ3) is as follows:

RQ3: How does the use of verbal cues (local language) on product packaging influence Muslim consumer perceptions and choice of products?

1.5 Symbolic value of product and individual level of religiosity interaction

Finally, the fourth research study concerns the influence of religiosity of individuals and their responses on the use of symbols on products of low or high symbolic value. As brands are associated with some countries and cultures (Torelli & Ahluwalia 2012), products can possess different symbolic value for different consumers. Further, the SIT suggests that consumers perceive and derive symbolic meanings from their consumption (Burbank & Martins 2009). This means that consumers may choose products depending on what the products represent to them and to others in their reference groups, rather than primarily on the product's functionalities and performance. The chosen product serves as a channel or medium for consumers to portray themselves to others based on the symbolic meaning that society attaches to the product. While the religious teachings and principles broadly guide consumers in choosing products, the selection may vary within a range of products according to the different lifestyle and different symbolic identity of individuals.

Along with the symbolic value of the product to consumers, the level of religiosity can moderate the effects of symbolic cues on consumer responses. Religiosity is defined as an individual's belief in God and his or her level of commitment to act according to teachings of God (McDaniel & Burnett 1990; Weaver & Agle 2002). As religious affiliation influences individuals, religiosity also has an impact. Religiosity encompasses the religious affiliation and an individual's commitment to act according to the religious teachings. A review of past studies shows that religiosity is an important predictor of consumer behaviour (e.g., Choi, Paulraj & Shin 2013). Some studies even suggest the greater effect of religiosity rather than religious affiliation. Despite studies alluding to the importance of individual religiosity, it is still unclear if Muslim consumers' attitudes towards the use of symbols differ according to their level of religiosity. Therefore, this study determines whether consumers' religiosity levels moderate the influence of religious cues on consumer decisions.

Researchers have found that consumers' religiosity levels can explain differences in consumer behaviour. For example, consumers with a high level of religiosity tend to be more prudent in their shopping behaviour (Delener 1990), and evaluate prior to making purchase decisions (Mokhlis 2009). Esso and Dibb (2004) commented that such behaviours may be underpinned by and consistent with the beliefs of the consumers' religions. More recently, Moschis and Ong (2011) summarised previous research on religiosity and consumer behaviour and the possible effects of confounding factors. Thus far, religiosity proves to be an important determinant of consumer behaviour and researchers in this area advocate additional research. Combining the effects of the symbolic value of products and individual religiosity levels, the fourth and fifth research questions (RQ 4 and RQ5) are as follows:

RQ4: How would the influence of symbols differ across products that symbolise low versus high religious values?

RQ5: What are the effects of the interactions of (symbolic Islamic values x consumer religiosity) on the influence of symbols?

In summary, this thesis applies the Symbolic Interactionism Theory to investigate consumer responses to the use of symbolic cues on product packaging. Against a backdrop of Muslim consumer market potential and their concentration on emerging markets, it investigates how the use of religious symbolic cues on product packaging may influence consumer responses in Islamic markets like Malaysia and Pakistan. In doing so, this thesis melds studies in religion and marketing, and develops the following five research questions, which to the author's knowledge, have not been studied or published before.

RQ1: How does the presence of symbols on product packaging influence Muslim consumer perceptions and choice of products?

RQ2: Comparing Muslim consumers in Halal-symbol legislated versus non-legislated countries, how does the presence of symbols on product packaging influence perceptions and choice of products?

RQ3: How does the presence of verbal cues on product packaging influence Muslim consumer perceptions and choice of products?

RQ4: How would the influence of symbols differ across products that symbolise low versus high religious values?

RQ5: What are the effects of the interactions of (symbolic Islamic values x consumer religiosity) on the influence of symbols?

After elaborating on the research streams and research questions, the following section briefly highlights the contributions.

1.6 Contributions

1.6.1 Research contributions

In making a theoretical contribution, an important objective of this study is to apply the SIT to consumer behaviour, particularly, to extend this social theory to Muslim consumer behaviour. As mentioned before, the theory is generally applied to social behaviours. Considering consumption as a social phenomenon, while a few researchers have extended this theory to consumer behaviour domains, none have theorised and extended the theory to Muslim consumers. To the best of this author's knowledge, this is the first study to apply the SIT for investigating Muslim consumers.

Another contribution is a profound understanding of largely ignored vast Muslim consumer potential. At present, inadequate comprehension of Muslim consumers has resulted in problems and huge losses for organisations. For example, recently (May/June 2014) Cadbury chocolate faced a backlash by Muslims consumers in Malaysia when two of its chocolate products were claimed to have ingredients that are not suitable for Muslim consumption (Cadbury tackles Malaysia pork problem, British Broadcasting Corporation 2014). The initial findings by the Health Department of Malaysia generated a public outcry and the company had to withdraw its products from the market. The word spread to whole of the Muslim world through mass electronic and social media, which resulted in different Muslim countries investigating and laboratory testing the suspicious products. Such incidents highlight the issues organisations should address beforehand when dealing with Muslim consumers and call for greater research and understanding of Muslim consumer behaviour across the globe.

The observation of marketing communication via print and electronic media advertisements and product packaging shows a frequent use of religious symbolic cues (for examples, see literature review chapters). However, no published study has examined their effects on Muslim consumer responses. This study is the first to investigate the influence of both symbols and verbal cues in the Muslim world. The objective is to tap into consumer choice and attitudinal responses towards the use of symbolic cues on different product categories, so that marketers can use this understanding more appropriately.

In marketing communications, the research to date mainly concerns advertising; product packaging is not given due attention by researchers. While the importance of packaging was recognised as a salient salesperson long ago (Dichter 1957), the main function of packaging was limited to product delivery and safety. Therefore, this study considers the importance of the packaging context and examines if the influence of symbolic cues extend to a product's packaging as it is found in the advertising context (e.g., Taylor, Halstead & Haynes 2010). Further previous research in advertising is also limited to western and non-Muslim contexts.

1.6.2 Methodological contributions

Consumer behaviour studies generally employ scales to measure attitudes and infer the results based on consumer judgements or evaluations. Researchers name this technique as a direct approach to measure attribute importance. A direct approach taps consumer responses by asking respondents to evaluate and mention the degree of importance on some scale (Louviere & Islam 2008; Mueller, Lockshin & Louviere 2010). This traditional approach is in line with classical models of consumer behaviour, as it is based upon the premise that behaviour stems from an individual's attitude towards an object or a product (e.g., thoery of reasoned action, Fishbein & Ajzen 1975). The data collected by these scales are analysed using techniques like structural equation modelling (SEM). While current consumer behaviour studies are still dominated by applying the direct approach, some researchers have questioned the validity of outcomes (Dolnicar, Grun & Leisch 2004; Jamieson 2004; Kampen & Swyngedouw 2000). Besides some measurement issues and predictive ability of attitudes (Cowe & Williams 2000; Wright, M & Klÿn 1998), researchers have questioned the direction of attitude-behaviour relationship (Winchester, Romaniuk & Bogomolova 2008). Therefore, this thesis uses both the attitudinal measures and the indirect approach by conducting discrete choice experiments (DCEs). An indirect approach is a useful method where the importance of an attribute is inferred from a choice by consumers (Louviere & Islam 2008; Mueller, Lockshin & Louviere 2010).

Along with a rating scale, the thesis uses DCEs to tap into consumer stated preference (SP) for the use of symbolic cues on product packaging. DCEs are based on the random utility theory that conceptualises choices as random based on probabilities that are fixed for each consumer and vary between consumers. The SP

technique allows researchers to develop hypothetical scenarios and manipulate the attributes of interest. As detailed in the method section (chapter 6), the DCEs were designed and choice sets were randomised by manipulating different alternatives. The discrete choice technique also allows the researcher to calculate the willingness to pay for a particular attribute. The combinations of attitudinal and choice measures employed in this thesis add to the validity and generalisability of the findings. Further, the strength of using both of the methods is to bring the design and analyses together in such a way that some of the best features of both methods can be applied. To the best of this researcher's knowledge, no previous published study has used both approaches simultaneously to examine the influence of symbolic cues on consumer responses.

1.6.3 Managerial contribution

Besides addressing the academic gaps identified above, this dissertation offers managerial insights into Muslim consumer behaviour, as well as their attitudes towards the use of symbolic cues. These findings should help managers develop better marketing strategies to operate in Muslim countries and address this growing, important consumer market. Past research has recognised the importance of religion for marketers, in particular for marketing communication (Swimberghe, Sharma & Flurry 2009), however previous studies are often overwhelmed by measurement and conceptual issues. Therefore, such studies lack practical and managerial contributions. This study aims to offer a profound understanding of the Muslim consumer market. As discussed previously, any lapses in marketing strategy that concerns Muslims, not only in Muslim countries but also around the globe, may result in consumer backlash.

Another practical contribution that stems from the unique research method used in this thesis is the calculation of consumer willingness to pay for the use of a symbolic cue on product packaging. Marketers can employ this technique to calculate immediate return on their investment to put symbolic cues on product packaging. Similarly, alluding to the importance of product packaging, the study also offers some interesting insights into how consumers process product packaging differently from advertising. While point of purchase elements are stressed by the researchers (Herm 2011; Sharp 2010), the product packaging area largely remains

under-researched. The increased budget allocation of organisations to product packaging also warrants more research.

In short, besides extending SIT to Muslim consumer behaviour, the study uses an appropriate approach to study consumer attitudes and behaviour. The method involves pre-tests and discussion with Muslim scholars and practitioners of marketing. Moreover, the experimental settings probe not only consumer attitudes but also consumer choices in order to model Muslim consumer behaviour with SEM and choice modelling. Importantly, the choice modelling method enables the calculation of consumers' willingness to pay for the use of symbolic cues on product packaging. Consumer willingness to pay technique and analysis has never been used before for symbolic attributes of products. Finally, the managerial contributions of this study are briefly mentioned.

The next section elaborates the research context, followed by an outline of the thesis.

1.7 Research context

1.7.1 Muslim world landscape

Muslim population globally

Alluding to the potential of the population as a consumer force, Muslim consumers have been referred to as the 'third billion', with China and India taking the top two spots (Chen 2010). Islam is more than 14 centuries old and is the second largest religion following Christianity (see Figure 1.1), with approximately 1.6 billion followers worldwide. Hence, Islam makes up about a quarter of the total world population (Pew Research Center's Forum on Religion and Public Life, here after referred to as Pew Forum (Pew Forum 2011).

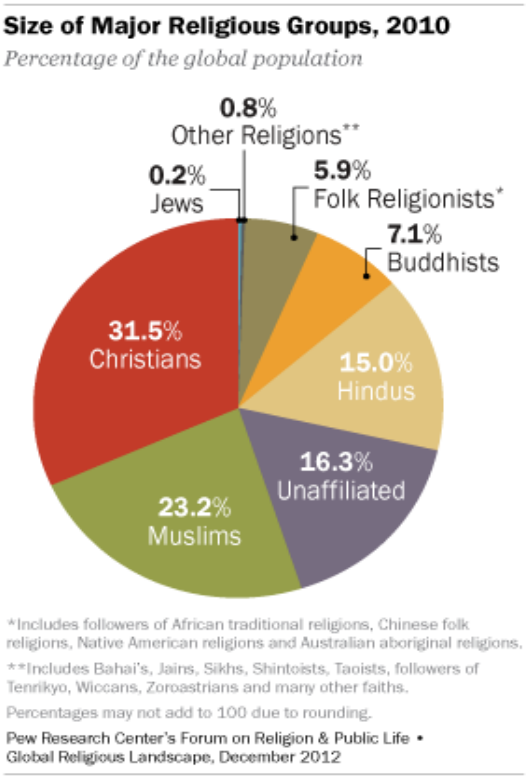


Figure 1.1 Major religious groups as of 2010 (Pew Forum 2012)

Considering the current growth rate of the Muslim population, Pew Forum (2012) estimates that the Muslim population will increase by about 35 per cent in the next 20 years, rising from 1.6 billion in 2010 to 2.2 billion by 2030, or from 23.4 per cent to 26.4 per cent of the total world population. At a more detailed level, the Pew Forum (2012) found that 60 per cent of the population of Muslim majority countries are less than 30 years old. The median age of Muslims will be 30 in 2030, which will be much younger than the median age of other important consumer groups in the world. As a result, Islam's share of world's youth (15–29 year olds) is increasing as in 1990 it was 20 per cent and in 2010 it jumped to 26 per cent. It is also predicted that in 2030, the world's youth of Islam will have risen to 29 per cent (Roberts 2010).

Although Muslims are in majority in about 50 countries of the world (25 per cent of the whole world), six-in-ten (62%) of all Muslims reside in the Asia-Pacific region (see Figure 1.2). This region provides vast potential opportunities for growth to businesses globally. This study focuses on two Muslim majority countries and

emerging markets of Asia: Pakistan and Malaysia. Pakistan is predominantly a Muslim country with 180 million people (2012), whereas Malaysia is also a majority Muslim country, although it is more diversified than Pakistan with 30 million people (2012).

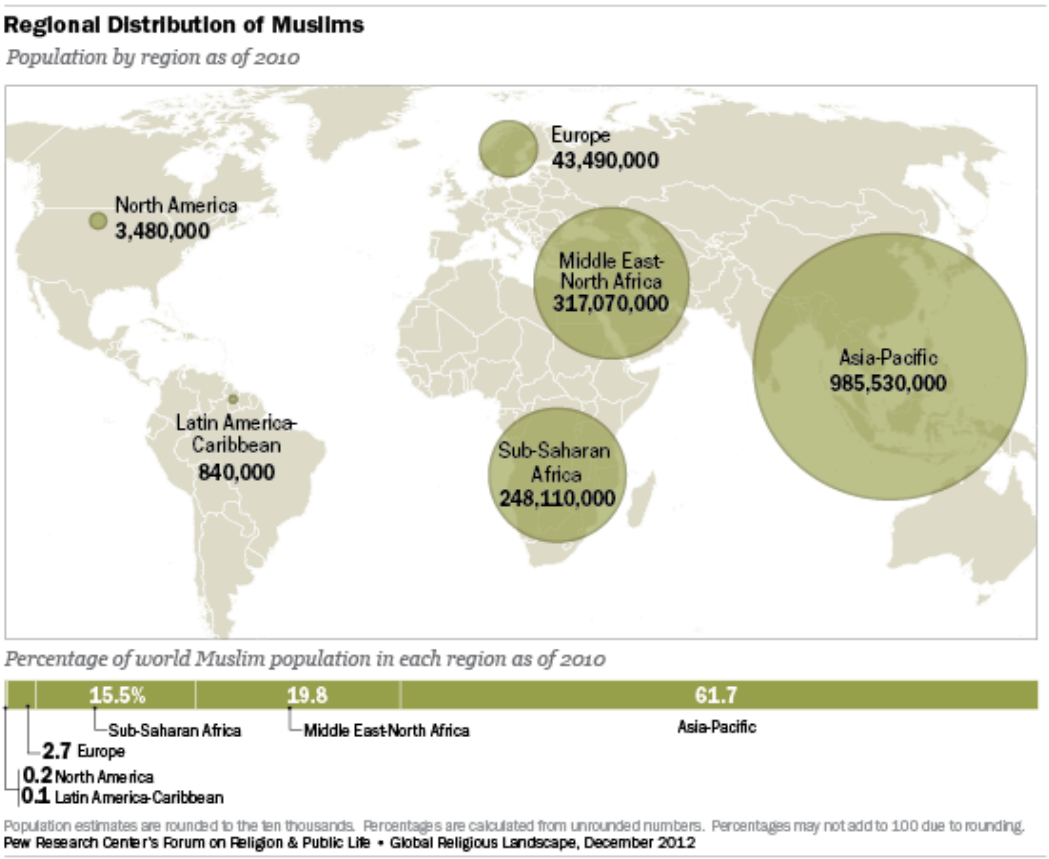


Figure 1.2 Muslim population by regions as of 2010 (Pew Forum 2012)

1.7.2 Potential and purchasing power of Muslim consumers

Muslim consumers as a market have a huge potential for businesses, but organisations will only be successful if marketers understand them (Hussain & Dernaika 2010). For any marketer operating at a global/regional level, Muslim consumers present a huge opportunity that should be targeted correctly to yield significant benefits. For example, in 2007, the global Halal food market was worth US$580bn annually and the fashion and clothing industry could potentially target 260 million Muslim women (Power & Gatsiounis 2007).

Similarly, in 2010 it was mentioned:

> Arab and Islamic markets have witnessed rapid growth, and are becoming increasingly consumer-driven, offering huge potential for marketers. Currently estimated at $2.7 trillion, this market is expected to grow to a staggering $30 trillion by 2050. (Michael Maedel 2010 cited in Temporal 2011).

In brief, these figures and statements allude to the vast untapped potential of Muslim consumer markets, which can benefit Muslim consumers and businesses if marketers understand their purchase and consumption behaviour.

The role and importance of religion; one religion, one nation

While Muslim countries may have different cultures, they share a common bond of religion, and because of this common bond, Muslims across the globe can be referred to as a homogeneous consumer group. Researchers in different areas have considered and treated them as one nation. Alserhan and Alserhan (2012) content analysed (Islamic marketing) published papers and have listed the authors who have maintained Muslims as an identical group. According to the authors, this one nation phenomenon is considered in the area of Islamic finance (Awan & Bukhari 2011; Chachi & Abdul Latiff 2008), Islamic logistics (Alserhan 2011; Wilson & Liu 2011), Islamic hospitality and entertainment (Al-Hamarneh & Steiner 2004; Din 1989; Jaffery 2009; Javed 2007; Stephenson, Russell & Edgar 2010), Islamic branding (Alserhan 2010; Frost 2007; Williams & Sharma 2005), Islamic diet (Hussaini 1993; Mullaney & Britton 2008; Power & Gatsiounis 2007), and Islamic dress and fashion (Kılıçbay & Binark 2002).

Islam as a religion is a common trait among all Muslims in the world. Muslims all over the world are guided by the two main sources of Islamic religion: the Quran and the Sunnah, life of the Prophet Muhammad (peace be upon him). These are the two main sources of Islamic teachings. These sources refer to Muslims as one *Ummah* (Arabic for nation) irrespective of their regions, race, colour and other physical attributes. Therefore, Muslim and non-Muslim scholars mention Muslims as members of one *Ummah*.

Another feature of Muslims that distinguishes them from followers of other religions is the role that Islam plays in their lives. Islam provides guidance about all aspects of life, including consumption. Hence, there is a greater influence of religion on Muslims' daily lives than followers of other religions. For example, at least eight-

in-ten (>80 per cent) Muslims in every country surveyed in sub-Saharan Africa, Southeast Asia and South Asia say that religion is *very* important in their lives (Pew Forum, 2012). The figures are even greater for the context of this study—93 per cent in Malaysia and 94 per cent in Pakistan mention that religion is very important in their lives (Pew Forum, 2012). Muslims more than any other religious group feel that faith plays an important role in their lives; this importance of faith has a correspondingly strong impact on consumer behaviour the majority of the time.

In the US, 97 per cent of all respondents agreed that being Muslim affected their consumption behaviour, with over half saying it was a primary factor of consideration in every single purchase (Ogilvy & Mather 2010). As Islam governs all aspects of a Muslim's life, including product consumption, this study illuminates consumers' purchase behaviour in two Muslim markets. By conducting research in two Muslim countries—Pakistan and Malaysia—this study highlights the similarities and differences among Muslim consumers from different countries.

1.8 Thesis outline

This thesis is broken down into four parts and eight chapters, which are as follow:

Part I

Chapter 1: Introduction

In this chapter, the research background and objectives are presented as a prelude to the research questions. Five research questions are posed. After a brief background, an overview of the research methodology is provided and lastly, the research is summarised.

Part II

Literature review

Chapter 2: Consumption and Symbolic Interactionism Theory

The foundation literature in the fields of product symbolism and the SIT research is detailed in this chapter. The SIT is explained as a theoretical framework for this thesis. The chapter presents an overview of the research from the 1950s until today in the area of symbolic consumption.

Chapter 3: Symbolic cues in marketing communications: Advertising and packaging

This chapter focuses on the use of symbolic cues in marketing communications. The chapter explains symbols (images) and verbal cues (language) and the current status of research in this area. Examples from marketing communications are also provided. This chapter also highlights the differences in advertising and product packaging to influence consumer behaviour and the need for research in product packaging attributes.

Chapter 4: Religion, marketing and consumer behaviour

This chapter details the influence of religion on consumer behaviour, particularly, how Islam influences Muslim consumption practices. The context of this study is elaborated and Muslim consumption practices, like the notion of Halal and other aspects are highlighted. The chapter concludes the literature review by applying the SIT to Muslim consumer behaviour and explains the position of this thesis in the developing literature.

Part III

Chapter 5: Conceptual development

This chapter points to and mentions the research gaps in this area. The need and rationale for this thesis is justified and the theoretical underpinnings and conceptual development for this thesis are specified. In light of the research objectives, the hypotheses development and conceptual model are presented in this chapter.

Chapter 6: Research methodology

In order to address the research objectives and test the hypotheses, this chapter provides the reasoning for employing the triangulation approach for this thesis and justifies the use of DCEs for studying consumer behaviour. The datasets for the four studies include their source and limitations. This chapter details the data collection process, examines the relevant test assumptions and explains robust techniques like choice modelling and SEM. Each study has a specific design and procedure for methodically executing the analysis.

Chapter 7: Results

This chapter details the results of the data analyses and mentions the hypotheses testing. While the test assumptions were elaborated in the previous chapter, this chapter mainly focuses on the findings of the study. The actual methods, including mathematical derivations, calculations, tabular representation and interpretations, are described.

Part IV

Chapter 8: Discussions and implications

This chapter discusses the findings and questions that were addressed. It highlights the academic implications and contributions of this thesis. Similarly, implications for marketers dealing or trying to approach vast Muslim markets are offered and finally, limitations are identified and potential future streams of research are suggested. Having outlined the research questions, brief contributions and research context, the literature review begins in the next chapter. The literature review informs about the current state of research in this area and identifies research gaps.

PART II

LITERATURE REVIEW

Chapter 2 Consumption and Symbolic Interactionism Theory

Chapter 3 Symbolic cues in marketing communications: Advertising and packaging

Chapter 4 Religion, marketing and consumer behaviour

As outlined in chapter 1, two research streams drive this dissertation: applying SIT and investigating Muslim consumer responses to symbolic cues (symbol and verbal) on product packaging. To inform and answer the research questions in chapter 1, the literature review comprises three chapters, which are outlined below.

Chapter 2 concerns the first research stream. It begins by reviewing the concept of symbolic consumption and symbolic value of products. Next, it appraises a popular social theory, SIT, and discusses SIT's applications from a consumption perspective. Despite the theory's popularity, it is mostly applied to explain social domains. Considering consumption as bearing symbolic meanings and as a social activity, this study applies this theory to consumer behaviour. The chapter reviews the process of meaning development in order to later investigate the symbolic cues on product packaging and their meaning for consumers. Chapter 2 concludes by presenting a summary of the key studies in symbolic consumption and elaborating some of the previous applications of SIT in consumer behaviour research. In short, this chapter introduces the framework for this study of Muslim consumer behaviour and their responses to the use of symbolic cues on product packaging.

Having reviewed the theoretical underpinning of this dissertation, ***Chapter 3*** highlights the use of symbolic cues in marketing communication. Symbolic cues can be symbols (images) and verbal (lingual) cues. After discussing the concepts related to symbolic cues, the chapter elaborates on the interpretation of symbolic cues by analysing consumers from an SIT perspective and discusses the general use of symbolic cues in advertising. The next section analyses the specific use of religious symbolic cues in advertising and product packaging. Chapter 3 concludes by stating that Muslims pay more attention to the visual cues in marketing communications and that there is a frequent use of culture and religion related cues in advertising to influence the consumers to purchase a particular product.

Chapter 4 concerns the second research stream that analyses the influence of religion on marketing and consumer behaviour. This chapter begins by reviewing past literature on the influences that religion has on consumer behaviour. Drawing from past studies that established the impact of religion and religiosity on consumption, and the scope for self-identity provided by religion, this thesis argues that this influence is particularly pertinent for Muslim consumers, as they consider the religious and secular aspects of life as one and the same. Islam teaches and states that doing business should be for the good of society as a whole, not for one's self interest. Therefore, chapter 4 reviews the notion of Halal and the use of the Halal label on packaging in different Muslim countries with different labelling laws. This literature review finishes with applying SIT to Muslim consumer behaviour and Muslim consumer responses to the use of symbolic cues on product packaging.

The literature review introduces and elaborates on the dissertation's conceptual model, which applies the SIT (chapter 2), the use and influence of religious cues in marketing communications (chapter 3) and investigates the influence of religion on Muslim consumer behaviour (chapter 4). The literature review begins with an examination of the product symbolism concept and the application of SIT.

2. Consumption and Symbolic Interactionism Theory

One means to interpret how people give meaning to objects and symbolic cues around them is through SIT. SIT explains how people interpret the world around them and how social influences work in society. While several studies (for a review see, Ahuvia 2005; Belk 1988; Bhat & Reddy 1998; Dittmar 2011; Ekinci, Sirakaya-Turk & Preciado 2013; Elliott 1999; Holbrook & Hirschman 1982; Sirgy 1982) have investigated symbolic consumption and product symbolism, few studies explore and link religious symbolism and SIT . Therefore, some consumer behaviour and SIT studies like Solomon (1983) and Leigh and Gabel (1992) can provide a viable base for this topic.

2.1 What is consumption?

What is consumption and does the meaning of consumption differ for different consumer groups around the world? These questions seem to be quite simple but thousands of scholarly publications focused this topic in the past century (Ekinci, Sirakaya-Turk & Preciado 2013). In marketing, consumption involves product pre-purchase, purchase and post purchase activities (Campbell, C 1987; Ekinci, Sirakaya-Turk & Preciado 2013). These stages of the consumer purchasing process are important for marketers to understand as they assist with understanding consumer behaviour and development of marketing activities, marketing communication activities in particular. The next section elaborates on what products mean to consumers and why and how consumers choose products, in order to guide marketers into developing stronger marketing communication strategies.

Product value and benefits

Traditionally, marketing theory treats consuming products as a response to underlying needs. These underlying needs can be utilitarian (functional) and symbolic needs. Likewise, product benefits are classified into functional and symbolic benefits (Guo, Hao & Shang 2011; Keller 2003; Park, Jaworski & Maclnnis 1986) to satisfy consumer needs. Apart from the functional benefits of the products, marketing researchers have also recognised symbolic benefits as important drivers in consumer behaviour (Leigh & Gabel 1992; Mick 1986; Peracchio & Meyers-Levy 2005). As is elaborated in the later section, an early study by Levy (1959) already endorsed the idea that products may provide symbolic value to consumers, and that consumers often choose the products not only for their functions but also to gain the symbolic value beyond the functional use of the products. The two types of product benefits, and whether these types provide symbolic value to the consumers, are depicted in Figure 2.1. However, this depiction is based on current literature and the position of this thesis will be discussed later. Before expanding on the symbolic benefits and attributes of the products, which is the main focus of this thesis, the next section briefly defines functional benefits of products.

Functional benefits are mostly related to basic needs from a purchase perspective and are also related to the product attributes. Resolving current or potential problems and reforming the normal situation can be included in functional benefits (Guo, Hao & Shang 2011). Functional benefits relate to the product attributes and are derived from utilitarian products. Although, utilitarian products (e.g. aspirin, air conditioner) satisfy important utilitarian needs, these are not charged with meanings and provide little room for self-identity and self-expression. Therefore, most of the utilitraian products are claimed to have no symbolic benefits. For example, washing machines, facial soap and toothpaste do not possess symbolic characteristics (Wright, JA 2005) and thus cannot offer symbolic benefits.

Symbolic benefits relate to the underlying needs of personal expression and social approval, which can be linked to non-product related attributes. For example, a pair of jeans represents informality (Leigh & Gabel 1992) and an automobile is a means of transport as well as an expression of social status. Furby (1978) investigated the symbolic meanings people associate with their possessions. The author found that people often refer to social power and status as reasons to own personal possessions. Similarly, a study by McCracken (1987) revealed that among

the more socially mobile segments of society, status is the symbolic attribute that people seek when purchasing a house. Belk (1984) asserts that product consumption is a viable means to express social status and identity when the opportunity for social mobility is high.

Marketing literature, particularly in branding, provides a number of examples for different products, where these products hold symbolic meanings for their consumers. For example, generally a motorcycle is a means of transportation for consumers, but for the owners of a Harley-Davidson 'it is an experience, an attitude, a lifestyle, and a vehicle to express who one is' (Aaker 1996, , p. 138). Marketing academics and practitioners are well aware of these consumer motivations and how they influence consumer purchasing. Therefore, in marketing communication, managers develop strategies to convey these symbolic meanings of the products and brands. A soft drink brand, Dr Pepper, for example, claims to provide opportunity for self-expression to its consumers as well as other brands such as Zippo lighters and Volkswagen Beetle. Long ago, researchers like Park et al. (1986) proposed that managers develop unique brand concepts on the basis of either conveying the functional benefits or symbolic benefits of the products. The authors further suggested that managers should reinforce their specific positioning through an overall marketing mix and clearly stick to either functional or symbolic benefits. This is summarised in Figure 2.1. Wright (2005) developed a scale to measure product symbolic status and listed products which can have symbolic value. This thesis however offers a different perspective to product values and product positioning (detailed in chapter 4).

Overall, the studies suggest the importance of symbolic meaning that consumers attach to products and that consumers purchase products to express their self-identity. These studies show the symbolic nature of a product and the symbolic benefits, which are derived by consumers by purchasing and using these products. Marketers address such needs of consumers by attaching symbolic attributes to the products.

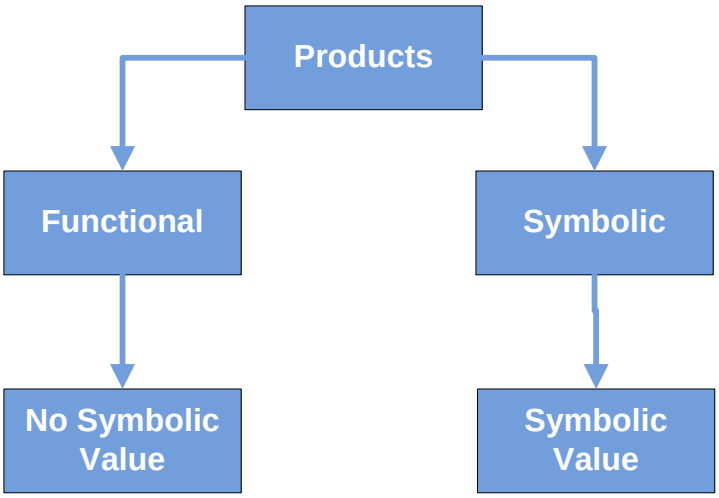


Figure 2.1 Product symbolism

The discussion thus far encompasses the concept of symbolic consumption and product value and benefits. Having discussed the different benefits (functional and symbolic) derived by consumers, the next section analyses conceptualisation and discusses product symbolism and symbolic consumption, with reference to consumer behaviour, which is the major focus of this study.

2.2 Product symbolism and consumer behaviour

Product symbolism and symbolic value of products are not new concepts to researchers and marketers. Marketers have studied and referred to the symbolic view of products since the 1950s and can be highlighted in the studies by Gardner and Levy (1955) and Levy (1959). These authors are among some of first scholars to recognise the psychological and social use of products. Gardner and Levy (1955) noted that a brand name acts as a complex symbol that represents a variety of ideas and attributes. The authors highlighted the product symbolism involved for consumer selections. Similarly, Levy (1959) stated product consumption as symbolic in nature that communicates symbolic attributes, such as differentiation, age, class and caste, belongingness and exclusion. These are the first writings in marketing to observe the symbolic power of products. While the studies are theoretical and conceptual, these studies highlight that product use can denote status and the membership of certain groups. A table (Table 2.2) at the end of this chapter

summarises the key studies in this area.

As Levy (1959, , p. 118) advised, 'people buy products not only for what they can do, but also for what they *mean*' (p. 118). The meanings of the products are thus important for the consumer, as well as others in society. Therefore, academics and marketers should consider the products' ability to signal symbolic value to consumers and society. Symbolic consumption allows consumers to form their self-identity and communicate the same to others. The role of consumption to symbolise self to consumer themselves and others is partially borrowed from psychology. The research in psychology on formation of self-identity has influenced both the conceptualisation of self and symbolic consumption. Research into this formation of one self and its communication via consumption can be divided into two streams. One research stream mainly prevailed in the 1950s to the 1970s and considers self-identity as an individual personality that holds certain personality traits (e.g., Birdwell 1968; Evans 1959; Tucker & Painter 1961; Vitz & Johnston 1965). This psychologist view refers self to the individual's own view of his or herself. Therefore, this traditional view of one self and identity of individuals was not an issue as it required less elaboration and reflection (Kellner 1992). Kellner, for example, describes a traditional view of identity as,

> … one's identity was fixed, solid and stable. Identity was as a function of predefined social roles and a traditional system of myths, which provided orientation and religious sanction to one's place in the world ... One was born and died a member of one's clan, a member of a fixed kinship system, and a member of one's tribe or group with one's life trajectory fixed in advance ... (1992, p. 141)

While a few studies in this period mentioned importance of others in self-formation and symbolic consumption, (Green, Maheshwari & Rao 1969; Grubb & Grathwohl 1967; Grubb & Hupp 1968; Grubb & Stern 1971) the main focus in these studies remained on the individual traits rather than the influence of others. One such exception is a framework by Grubb and Grathwohl (1967) that underpins the common understanding and shared interpretations of product symbolism.

Following on these studies, research in the 1980s considered the influence of others in society on self-formation, identity and consequently, symbolic consumption. The researchers viewed self-formation as having two dimensions: the personal self (internal traits) and social self (external traits). The studies in symbolic consumption took into account both perspectives: the symbolic role of products for the internal self as well for 'others' in society. These others may be the ideal self for

an individual consumer or member of the reference group, as a reference group is known as ‘an actual or imaginary individual or group conceived of having significant relevance upon an individual’s evaluations, aspirations, or behavior’ (Park & Lessig 1977, p. 102). Consumers desire identification with the reference groups, as reference groups motivate consumers to buy certain products that are associated with the group. For example, Escalas and Bettman (2005) suggest that the symbolic properties of reference groups are associated with the products that reference groups are perceived to use. These associations transfer from reference groups to consumers whereby consumers choose the same products as their reference groups to portray identification and association with reference group.

Consumer behaviour literature, in fact, provides many examples of this influence of reference groups and others in society. In one of the earliest studies, Park and Lessig (1977) examined the influence of reference groups on housewives and students. The study showed that reference groups have influence on individuals’ purchasing behaviour and that products have communicating power. This was evident in the results, which showed significant differences in the influence of reference groups on product selection between homemakers and students. Later, researchers noted the influence of social interaction and the role of symbolic consumption on communicating between self and others (e.g., Leigh & Gabel 1992; Solomon 1983).

While this phenomenon is not the essential theme of this thesis, another important stream to mention is the dissociative power of reference groups. The research in this area confirms that consumers yearn for association with a particular group, as well as aim to disassociate themselves from other groups. Hogg and associates across a number of studies (Banister & Hogg 2004; Hogg 1998; Hogg & Michell 1996) established the relationship between one self, others and their consumption patterns. These studies propose that consumption behaviour relates to an individual’s motivation of identification with some groups and/or non-identification with a specific group. Banister and Hogg (2004), for example, showed that clothing possessed communicative power and it communicated both identification (with groups perceived to be similar) and distinction (from groups perceived to be different and avoided). Irrespective of whether consumers use products to associate or disassociate themselves from others in a society, it is well

established that products possess symbolic value and meanings for consumers as well as communicative power to covey these symbolic meanings.

The notion that products possess symbolic value and meaning for the consumers and that these also have the ability to portray the same to others in society has important implications for researchers and managers. Belk (1988) also stressed the importance of understanding the symbolic meaning consumers associate to their purchases. Therefore, organisations do not sell products and services only from a functional perspective—they sell feelings, lifestyle and meaning to address the symbolic needs of the consumers (Berry, Sieders & Gresham 1997; Holbrook & Hirschman 1982; Pride & Ferrel 2003). The symbolic needs of consumers also include their desire for identification with a particular group. These groups may be cultural groups to which consumers actually belong, whereby these groups affect consumer purchase decisions. Similarly, research into the area of brand communities, especially the subculture of consumption, is well documented in the literature (e.g., Cova, Kozinets & Shankar 2007; Cova & Pace 2006; Cova, Pace & Park 2007; McAlexander, Schouten & Koenig 2002; Thompson & Arsel 2004). Consumers are known to use specific products used by a similar group or community to whom consumers want to associate themselves. A similar group refers to a group of people:

> … who share their interest in a specific brand and create a parallel social universe ripe with its own values, rituals, vocabulary and hierarchy (Cova, Pace & Park 2007, p.314).

Thus, consumer subcultures are formed and identified by a sense of belongingness to that group by practicing the rituals and traditions associated with the brand (Muniz Jr & O'guinn 2001). As mentioned before, some of the well-known brands have power to develop such brand communities, as evident with brands such as Harley-Davidson motorcycles (Schouten & McAlexander 1995), Apple with Macintosh (Belk & Tumbat 2005), or Nutella (Cova & Pace 2006). Schouten and McAlexander (1995), for example, introduced and examined the subculture of consumption by conducting an ethnographic study with Harley-Davidson motorcycle owners. The three years of fieldwork extended the framework of subculture of consumption to the modern consumer culture. Moreover, the study recognised that consumption activities and product categories serve as basis for social interaction and cohesion. Later, Belk and Tumbat (2005) used historical

images, interviews and observations with Macintosh computer users to understand consumer cult. As demonstrated by Schouten and McAlexander (1995), these authors found extreme consumer beliefs and 'romantic' consumer relationships regarding the brand.

As the possession of a particular brand communicates association and identification with a similar group, consumers also use products to communicate cultural meanings. In this case, the symbolic meaning and value of the product may be specific to some cultural group and not as important to other groups. The next section reviews some studies in this area.

Products to symbolise culture

Products also have the power to communicate cultural aspects. Consumers can purchase such products to identify with or show belongingness to a specific culture (Crane, Hamilton & Wilson 2004; Lindridge, Hogg & Shah 2004; Oswald 1999; Peñaloza 1994) Researchers have established that clothing possesses communicative power as some consumers dress to identify themselves as belonging to a particular cultural group. For example, in an earlier study, Forney and Rabolt (1986) discovered that individuals wear cultural clothing to display a stronger expression of culture. Similarly, O'Neal (1999) shows that African American women professionals use cultural dress to define and express their culture within a workplace. In a study with participants of Scottish ethnicity, Crane et al. (2004) discovered that consumers with salient Scottish ethnicity put more effort into the symbolic use of Scottish dress. That is, they are attentive to the symbolic appeal of the ethnic or cultural dress to communicate membership of that cultural group. In fact, consumption of cultural clothes strongly relates to the cultural identity of the consumers (Chattaraman & Lennon 2008).

The communicative power and expression of cultural aspects is not limited to the apparel and clothing products. Lindridge et al. (2004), for example, identify products such as food and alcohol along with clothing as symbolic of cultural aspects. Similarly, Peñaloza (1994) notes foods, clothing and automobiles as products having symbolic value to express cultural aspects. Oswald (1999) investigated the Haitian-American community and observed the symbolic value of products such as daishikis, pita bread and other consumer goods to construct and communicate a sense of Haitian-American culture related aspects.

In other words, products hold cultural symbolic value and consumers use the culturally symbolic value of products to confirm and communicate their cultural identity to not only themselves but also to others. Like the cultural fellows, the followers of the same religion associate and share meaning with objects. In the same analogy, if the objects charged with meanings are attached with some products, it may attract the consumer to associate with and share those symbolic meanings.

In summary, consumer behaviour researchers consider symbolism as a 'complex and obscure' concept warranting more research (Allen 2002, , p. 2475) as many researchers aim to shed light in this area. A number of empirical studies have shown that the symbolic meaning of product attributes also influences consumer attitudes and choices along with the functional and/or utilitarian benefits (e.g., Ahuvia 2005; Bhat & Reddy 1998; Dittmar 2007; Ekinci, Sirakaya-Turk & Preciado 2013; Hong & Zinkhan 1995; Samli & Sirgy 1981; Shavitt 1990; Sirgy 1980). Products may possess varying degrees of symbolic meaning, ranging from having high (positive) symbolic value to having low (negative) symbolic value. These meanings are attached and communicated by the manufacturer/advertiser as a point of differentiation for their product (Prown 1982). Prown (1982) differentiated attached meanings from inherent meanings of the possessions by asserting that inherent value is intrinsic and relates to the makeup of the product. For example, the inherent or functional meaning of an automobile is transportation, whereas it may also be a symbol of social status and expression of wealth attached by society or a group. Similarly, products have cultural symbolic value and individuals consume such products to show membership of a particular cultural group. Table 2.1 provides a summary of the key studies in this area.

As mentioned earlier, a detailed literature review on product symbolism and symbolic consumption established that consumers attach symbolic meaning to products and derive symbolic value from the products. Products of symbolic value are consumed to affirm and express self-identity. Self is conceptualised as relatively stable and relates to internal personality traits of an individual as well as being influenced by social environment. A number of frameworks can be used to explain this construction of self. Some of these theories can minimise either the importance personal self or the influence of others in the society. However, such conceptualisation of self as formed through the process of social interaction is well developed within SIT (Coles 2008; Hitlin & Elder 2007; Mead 1934). From an SIT

perspective, self is constructed and informed by both the 'personal' and 'others' in a society. These factors explain how individuals give meanings to objects, especially symbolic cues around them. The meaning development process is in fact affected by consumers themselves and others in society. SIT clearly emphasises meaning, interpretation, self and social interaction. The next section sheds light on SIT, a theoretical framework for this study and the meaning development process of consumers. The following section starts with a brief historical background of SIT followed by meaning development process according to this theory.

2.3 Symbolic Interactionism Theory: Concepts and evolution

SIT is derived from the thoughts and writings of sociologist, George Herbert Mead (1934). However, sociologist Herbert Blumer introduced the term symbolic interactionism for the first time in his work 'Man and Society' (1937, 1969). Much of today's SIT literature is based primarily on the works of Mead and Blumer. Mead (1934, 1938) provided the foundation for symbolic interactionism and proposed the process by which an individual interprets the world around them and assigns meaning to objects, people, and self, whereas Blumer (1969) advanced this theory and explained the implications. Although Mead's theory and propositions are a century old, it is still relevant in contemporary research (Stryker 2008). A recent study by Hudson and Balmer found that 1,000 articles cited Mead, including more than 800 in sociology and approximately 175 in business journals (Hudson & Balmer 2013).

According to SIT, human beings are social beings, and they interpret the world around them by giving it meanings learnt from their environment (Burbank & Martins 2009). This understanding of social learning and interpretation has significant implications for human behaviour. The behaviour of the individual mainly depends upon the interpretation and the context of behaviour. Therefore, human beings do not respond to the situation or event as it happens, but on the basis of their interpretation and definition of that situation or event (Burbank & Martins 2009). This theory has mainly been used in social domains and occasionally covered in communication processes in different social contexts. For example, Trevino, Lengel and Daft (1987) employed the symbolic interactionism framework to explore

the media choice process of managers during managerial communications. The qualitative study involved interviews with 65 managers from 11 different organisations and tested different communications incidents involving face-to-face, telephone, electronic mail and written media methods. During this research, managers were asked to give reasons for the choice of a particular medium. The findings indicated there were three factors that influenced their choice of media. These factors were the ambiguity of the content of message and richness of the medium, second, the symbolic cues provided by the medium and third, the situational factors, such as time and distance. Therefore, the authors stated that managerial and organisational communication processes involve some sort of symbol creation and that the meanings were shared between the sender and recipient in an organisational setting. This is well explained by symbolic interactionism framework.

Applying the SIT to marketing and consumer behaviour, however, means that consumers may choose products depending on what products represent to them and to others in their reference groups, rather than primarily on the product's functionalities and performance. The chosen product then serves as a channel or medium for consumers to portray themselves to others based on the symbolic meaning that society attaches to the product.

The next section discusses the process of meaning development and takes into account the role of personal self and other humans and objects around the person to develop meanings. The SIT is, in fact, embedded in both psychologies, as it considers the role of self and sociology and the role of others in meaning development.

2.3.1 Process of meaning development

Individuals develop and assign meanings to objects around them (Mead 1934, 1938), by interacting with others in the society. From a symbolic interactionism perspective, the formation of meaning and the interpretive process are important for determining how individuals assign meanings to certain objects. Individuals are not simply reflexive in producing a response; rather, they often first interpret the situation and consider the sender’s perspective before creating a response as their behaviour largely depends upon the situational context. In other words, the SIT holds a constructivist view of human behaviour. Contrary to the objectivist approach that

focuses on the real or actual meaning of the objects, the constructivist approach appreciates the symbolic meaning of objects. According to the constructivism approach, the meanings are developed and interpreted as a result of an individual's interaction with others in society. Therefore, the *role* of the individual and *situation* play vital parts in meaning development.

The power of role and situation

Although the main focus of symbolic interactionism is based upon one self, it also emphasises the situation, which is defined as:

> … an organisation of perception in which people assemble objects, meanings, and others, and act towards them in a coherent, organised way. (Hewitt 2000, p. 72)

These meanings and interpretations may change according to the *situation* and *role* of the individual in that situation. Different people play different roles in society. Similarly, an individual may have different *roles* in different situations and places. For example, in a family setting, one person may be a parent to his or her child and a son or daughter to his or her parents. Moreover, the same person may be a boss to some people and a subordinate to others in an organisational setting. Likewise, in marketing communication, interpretation will be according to the context and situation. For example, as discussed later in more detail, a symbolic cue may be interpreted as appropriate and evoking positive associations in one situation in a particular product category but the same symbolic cue may be perceived as inappropriate in another product category.

2.3.2 Symbolic Interactionist Theory framework elements

To elaborate on the process by which human beings give meaning and interpret the world around them, Mead (1934) uses a framework of three elements *the I*, *generalised other*, and *the me* (see Figure 2.2). In this framework, *the I* is a personal experience and it explains how an individual gives responses to other human beings, groups and objects in society. According to this element, the human being interprets

and/or reacts to the situation based on personal experience and the response is not solely based on the opinion of others. For example, if a new product is introduced into the market, family, friends, colleagues and others in society may talk about that product and express their views in favour or against the product. However, according to this element, *the I*, the individual will not simply view the product as being seen by others. Instead, he or she will make his or her own opinion after they have had a personal experience with the product. In the context of this study, for example, a symbolic cue on a product package will be viewed and perceived by the individual according to his or her inner self. More specifically, how consumers view products that are privately consumed and bear symbolic cues on product packaging. The current literature suggests that there is little influence on privately consumed products by reference groups (Lessig & Park 1978; Park & Lessig 1977).

By contrast, the *generalised other* refers to an organised set of attitudes, beliefs and meanings learnt by an individual by being part of a society. These are meanings that society as a unit collectively assigns to objects or symbols in society. The individuals learn what is liked, disliked and what is acceptable or not acceptable in any society by living in and participating in that society. In the example of the new product, the individual will view the product through the lens of others. In this way *the generalised others* can also relate to word of mouth and the influence of a reference group in consumer behaviour. For example, if the person wants to be associated with a particular cultural group, he or she may want to consume products liked by that social group. In some situations, the product type may allow others to view the use and consumption of that product. As depicted later Mowen (1995) used an example of Mont Blanc pen to highlight the visibility of product usage.

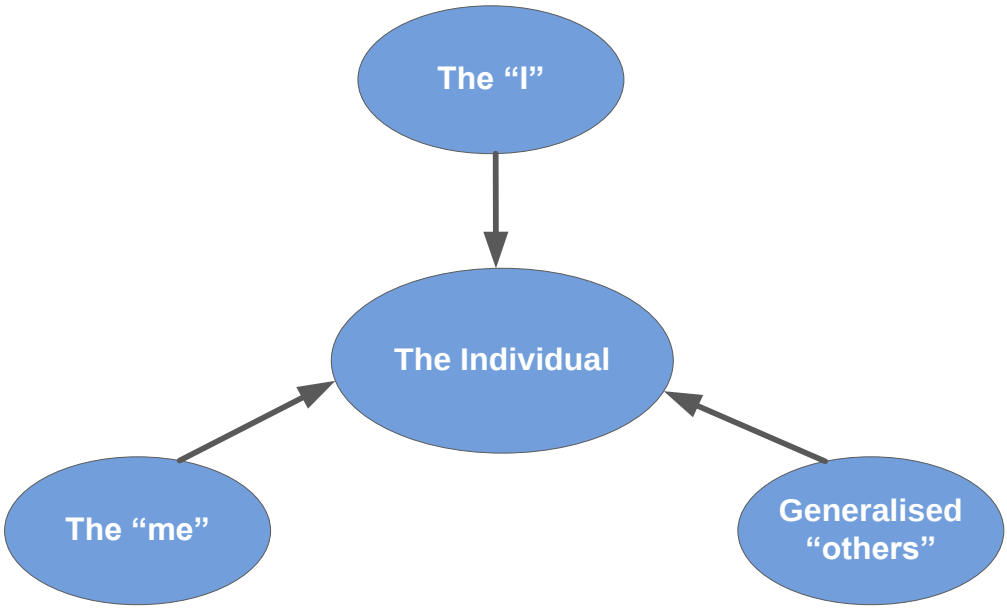


Figure 2.2 Mead’s framework of interpretation process

The me element refers to the expectation of others in society. Therefore, it simply means that the object or message is interpreted by knowing the expectations of the sender or the other party. The understanding and interpretation of the other is important to the individual in taking the role of the other. The symbolic interaction is not complete unless the individual is empathetic to the understanding and expectations of others and can identify with them. In the example of marketing communication and messages about the product, *the me* element means, the individual perceives the message from an encoder’s viewpoint. However, consumers can also perceive the use of symbolic cues on a product package from the designer’s perspective. Therefore, an individual evaluates and responds to a situation by using these three elements, *the I, generalised other* and *the me.*

Keeping in view the mental process of meaning development by human beings, psychology is not simply science to deal with consciousness; it examines the experience of the individuals in relation to the conditions under which the experience takes place. In social psychology, the conditions are social and behaviouristic, whereas the approach to experience is made through interaction (Mead 1934, p. 40).

In short, social theories provide theoretical frameworks to sociologists to analyse and explain the social processes and social actions by individuals. Symbolic interactionism, a key social theory, guides research on meaning interpretation and social behaviour and interaction through psychology, sociology, and social psychology. The theory also suggests the social interaction of individuals and their societies (Blumer 1969). The basic principles of this theory can be summarised as following:

- Human beings have thinking abilities and their thoughts and behaviour are shaped by their social interactions with other individuals in society.
- Individuals interpret meanings and symbols used in society by social interaction.
- Individuals have the capacity to alter the meanings and symbols they use in interactions; however, it depends on the situation they are in.

The interpretation of meanings and the behaviour of the individual is the product of the individual themselves, their social interaction with others and the situation. Individual sense of self influences these interpretations, as well as others in the society and the situation. Each of the principles of this theory depicts the psychology formation and behaviour of the individuals. The individual mind is not a closed box to do the mental processes and interpretation in isolation. Rather, the thoughts and behaviours are shaped by human conduct and interaction with others. Indeed, the importance of the things belongs to things in their relationships to individuals (Mead 1922, p.163) and is discussed as constructivist approach to human behaviour.

Reed (2002) suggests that self, social identity and social interactions should lead consumer research, whereby consumption of products is a social activity. This applies to both private consumption and public consumption, because the meaning attached to products is constructed by the society. SIT sheds light on self-development, social identity and the influence of interaction with others in society. Therefore, these are the basic concepts of SIT. Reed's contention fits quite well with SIT, where I, me and myself denote self and are the manifestation of social interactions with others. Recent research into the impact of social groups on consumption also advises marketers to consider the importance of consumer social

identity and reinforce this identity into their marketing designs (Champniss, Wilson & Macdonald 2015). Therefore, symbolic consumption can be well explained by SIT, where individuals are consistent with others and behave the way others expect them to behave in certain situations. The next section discusses the SIT applications with reference to symbolic consumption.

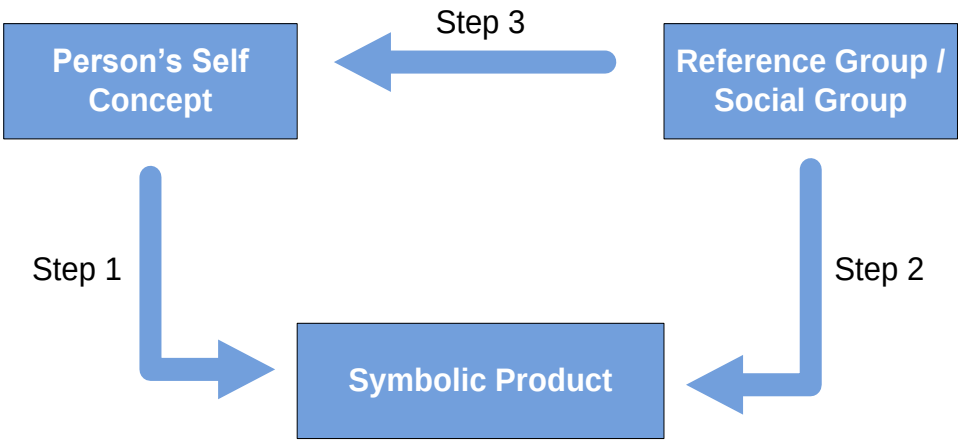
2.4 Symbolic Interactionism Theory and symbolic consumption

SIT has traditionally been applied to explain different aspects of sociology such as how human beings express emotions in their social lives (Shott 1979) and the process through which people form social organisations and structures (Maines 1977). Nevertheless, SIT can be used to explain the underpinning phenomenon in symbolic consumption. Flint (2006, p.351) stated that research conducted on symbolic consumption can be traced back to the 1980s (Hirschman & Holbrook 1980) with examples of products as social stimuli (Solomon 1983), such as gift giving and the movement of meaning (McCracken, 1986; Ruth, Otnes & Brunel 1999; Sherry Jr 1983); role transition and self-identity (Schouten 1991); consumption symbolism (Belk, Bahn & Mayer 1982); symbolic behaviour in aesthetic contexts (Holbrook & Grayson 1986); the decoding of symbolic meaning and adopting local roles (Thompson & Tambyah 1999); and symbolic consumption and holiday rituals (Belk, Wallendorf & Sherry Jr 1989; Wallendorf & Arnould 1991).

The last two decades have seen a lot of research conducted on symbolic consumption; however, most of the studies do not include a symbolic interactionism perspective, with exceptions like Solomon (1983). Solomon (1983) and Leigh and Gabel (1992) first extended this theory to marketing and proposed that the theory may explain consumer behaviour in that consumers associate symbolic meanings with products that they consume. Although Mead's (1934) thoughts propose that individuals interpret and react to the situation based on their experience and reactions of others while in a society, Goffman (1979) added to this theory that individuals consciously build their impression and want others to think of them in a certain way. The purchase and use of certain products may provide the individual an opportunity to portray themselves to others. Often, the symbolism is a manifestation of

consumers' self-image or self-identity. Leigh and Gabel (1992) used an example where blue jeans symbolise informality in society, and hence, people buy and wear blue jeans in order to portray or communicate their informal stature. Similarly, Solomon (1983) argued that consumers structure their self-concept and behaviour, via the subjective experience, that they derived from consuming products. In other words, consumers may perceive social meanings in products and choose meaningful products that are congruent with the roles that they play or want to play in society.

Mowen (1995) offered a symbolic consumption model that not only depicts the propositions of symbolic interactionism, but also the interactions between an individual's self-concept, the situation and the consumption of a symbolic product. Referring to SIT, it elaborates the process in which self may be communicated to others through the consumption of symbolic products. According to this framework (Figure 2.5), a consumer purchases a product that may communicate aspects of his or her self-concept to others (Step 1). The consumer then hopes the others will hold the expected perception of the symbolic nature of the product (Step 2) and lastly, the consumer hopes that the reference group views him or her as possessing some of the same symbolic qualities as the product (Step 3).



Step 1: Person buys product that is symbolic of self

Step 2: Reference group associates product with person

Step 3: Reference group attributes to person the symbolic qualities of the product

Figure 2.3 The communication of self to others via symbolic products (Mowen 1995, , p.253)

For example, the print advertisement for Mont Blanc pens (see Figure 2.4) depicts that one can express his or her self to others by possessing these pens. (Mowen 1995).



Figure 2.4 The advertisement suggets that ownership of a Mont Blanc pen can express one's self-concept to others

Mowen (Mowen 1995; Mowen & Minor 1998) used an example of Mont Blanc pens to consider the product as an explicit expression of one's self to others. In fact, the authors attribute the communicative power of products to three product characteristics as mentioned by Holman (1981). First, the product's consumption should be visible to others. Second, the product must have variability in the sense that a few should have ability to afford the product and third, the product should have personalisability to depict the stereotypical image of the user. In a way, the authors limit the symbolic communicative power of the products to publically consumed products or the symbolic consumption would then refer to conspicuous

consumption only. For example, less expensive products that most people can afford would not hold as much communicative and symbolic value.

Contrary to the product characteristics mentioned by Mowen (1995), other researchers view that products can hold symbolic value, irrespective of the nature of consumption, whether that it is conspicuous consumption or private consumption. As mentioned, Leigh and Gabel (1992), for example, use the example of wearing jeans to display student group membership. Using a SIT framework, their conceptual paper offered six propositions to understand product symbolism and develop marketing strategies, as seen in Table 2.1.

Table 2.1 General propositions of product symbolism (Leigh & Gabel 1992, , p. 7)

1) The symbolic meaning of products is ultimately defined by society. Although not explicitly stated, it is important to note that a shared symbolic meaning by society at large is not necessary for symbolic definition to occur. Shared symbolic meaning within a relevant reference group is sufficient for meaningful symbolic definition among group members. For example, a group of students at a given high school might attach symbolic meaning to a particular article of clothing, such as a certain brand or style of blue jeans or high-top sneakers.
2) **Products can be viewed as causes of behavior, in addition to their role as satisfiers of, or responses to a need.** Specifically, the symbols attached to a product by a certain relevant referent may cause a consumer to act. Symbolic meaning can thus serve to either increase or decrease the likelihood of purchase, depending on whether the consumer identifies with or holds negative attitudes towards the reference group, respectively.
3) **Product symbolism affects the formation of an individual's self-concept.** The way a consumer sees others evaluating him is based, in part, on the products possessed and consumed. For example, an overweight, sedentary individual might purchase a membership at a health club and a collection of designer workout gear and then start to perceive himself as active and athletic.
4) **The more complete and consistent the set of product symbols possessed by a consumer, the higher the probability of successful role performance.** Consumers may then tend to buy groups of products, which are consistent with the image required by the roles performed. For example, a businessperson, in an attempt to be accepted by his peers, may purchase not only a new suit, but also a new briefcase, and a pair of shoes consistent with the image he wishes to project.
5) **Symbolic purchasing behavior is more likely to be exhibited when the consumer lacks knowledge about how to perform a certain required role.** When such knowledge is lacking, a consumer will use the symbols embedded in products to define one's role. Periods of consumer role transition exemplify these knowledge-deficient situations. For example, a new college student may purchase certain items and brands of clothing quite different from ones purchased in the past merely because the student notices these items and brands being worn by other students or groups of students in order to “fit in” in the new environment.
6) **Although products are purchased because of the symbols attached to them at a societal or group level, this symbolism may be consumed on an individual, private basis.** For example, a consumer may purchase a certain style of television because of its societally-defined symbolic value, but will consume it in the private surroundings of one's home.

Similarly, in the sixth proposition, the authors clearly state that privately consumed products can also hold symbolic value and consumers can possess such products because society has attached certain meanings to these products. This view of symbolic consumption seems more appropriate as consumption overall is a social activity that involves product pre-purchase, purchase and post purchase activities (Ekinci, Sirakaya-Turk & Preciado 2013).

In line with SIT, McCracken (McCracken, 1986, 1989) describes the staged movement of meaning from the culturally constituted world through consumer goods to individual consumers (see Figure 2.5). In his study, McCracken (1986) uses a celebrity endorsement example to illustrate this phenomenon. In the first stage, through the celebrity's endorsement of a product, the meanings the celebrity holds are transferred to the product. In the second stage, the consumer purchases the product to adopt the meanings that originated from the celebrity and incorporates them into their own self-image. This indicates that a consumer comes to possess some of the symbolic meaning (e.g., status, success and attractiveness) that the celebrity represents in the endorsement.

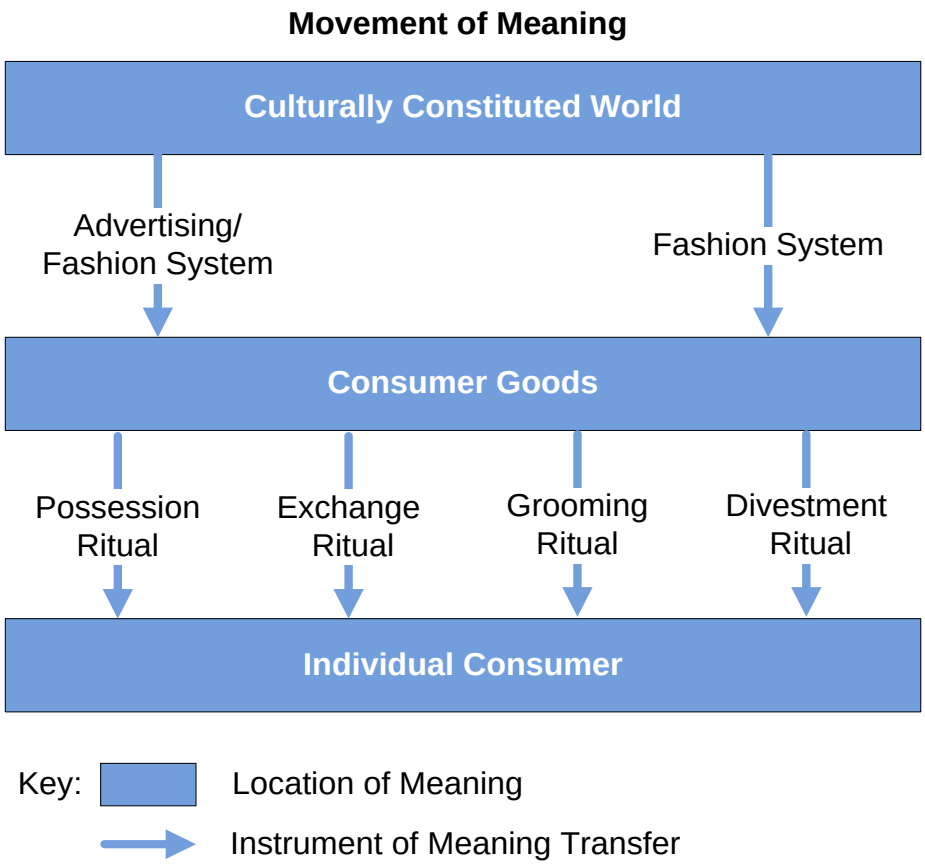


Figure 2.5 Movement of meaning (McCracken,1986)

Figure 2.5 highlights the importance of symbolic associations for consumers and how marketers deliberately attach these symbolic associations to products. This process was empirically tested and confirmed by later research. For example, Langmeyer and Walker (1991) conducted a study to identify the meanings transferred from celebrity to the company endorsed by the celebrity. The authors examined associations between a celebrity, Cher, and a company, Scandinavian Health Spas, whereby Cher endorsed the company in an advertisement. The respondents were asked to elaborate the associations they made between this celebrity and the Spas. Most of the respondents mentioned an association with becoming attractive like the celebrity; hence, most of the associations were positive. Research has also shown greater effectiveness of advertising when a celebrity is employed to endorse and a firms' products have common attributes (Kamins 1990; Kamins & Gupta 1994; Lynch & Schuler 1994). Consequently, organisations spend a lot of time, money and effort to employ an appropriate celebrity for their advertisements.

While the effects of such associations are mainly positive, these effects can differ across individuals. However, collectively the research suggests the importance and impact of associating symbolic value to products that require careful attention. As elaborated in the example of celebrity endorsements, consumers seek symbolic benefits of the products, which prompts marketers to develop ways to attach symbolic meanings to their products through marketing communications. Mick (1986) envisaged the consumer world as a web of meanings among consumers and marketers woven set in cultural space and time. This definition elicits three major actors in the consumer world. First, there are marketers who promote or advertise products. Second, the products are promoted by highlighting the symbolic meaning of the products to consumers and lastly, the products may have different meanings to different consumers depending on their cultural background.

The positive associations of the endorsers are well documented in the literature. Another important means to attach and convey symbolic meanings of the product to consumers is via the use of symbolic cues in marketing communications. Symbolic cues can also have associations just like endorsers.

In sum, marketers can transfer symbolic meanings from celebrities to products that are endorsed by celebrities. Consumers then purchase these products to be associated and identified with those who endorse the advertisement. Similarly, symbolic cues can transfer symbolic meanings if these cues are attached to a product via marketing communications. This phenomenon can be viewed from a cultural perspective where consumers have shared meanings and cultural perceptions of symbolic cues. While the next chapter discusses the use of symbolic cues in marketing communications, SIT provides a good explanation for how shared meanings are attached and interpreted in society. In this case, consumers belonging to the same group or culture are viewed as having a similar set of associations for different symbolic cues. When symbolic cues are attached to a product, the symbolic meanings are transferred to the product and the set of associations are then identified with those products. Finally, consumers purchase these products with the symbolic cues to be identified and associated with certain groups.

2.5 Conclusion

Symbolic consumption is an important phenomenon for researchers and marketers as products can provide functional and symbolic benefits. SIT can better explain this phenomenon. The philosophical view of SIT can be traced back to early scholars like Mead and Blumer, (and has evolved into different schools of thought). However, all SIT schools utilise the conceptual and psychological underpinnings involved in the meaning and interpretation development process.

SIT is a way to explore how individuals create and express their identities. It is also a process of defining oneself and communicating and expressing the self-concept to others in a social group. The purchase and consumption of products provides room for self-expression and allows individuals to be recognised as a member of a specific social group. The self-identity of an individual is influenced by the environment and society in which he or she resides.

SIT is chosen as a theoretical framework for this study because it offers a perspective that combines the individual psychology and social influences that are involved in consumer purchase choice. The use of SIT will enable the researcher to examine the responses to the use of symbolic cues, which then assists in identifying if there is a symbolic nature to a consumer's choice and how these symbolic cues are interpreted on different products. Therefore, the use of symbolic cues can add to the symbolic value of a product.

Before discussing SIT in relation to Muslim consumer behaviour, the next section (chapter 3) elaborates on how symbolic cues are employed in marketing communications. Further, it discusses the meaning individuals give to the use of symbolic cues in marketing communications.

Chapter 4 reviews the relevant literature on the interplay between religion and marketing and how religion influences consumer behaviour. The impact of religion is more pertinent when studying Muslim consumers, as the religion Islam provides guidance in everyday life, including consumption. Finally, the SIT framework is applied to this study to investigate Muslim consumers' responses to the use of symbolic cues on product packaging.

Table 2.2 **Summary of the key studies in product symbolism and symbolic consumption**

Author(s)	Key Objective	Method	Findings/Summary
(Haire 1950)	To understand the role of personal motivations and personality characteristics in buying	The study involved an experiment with women who responded to projective tests using two shopping lists	The study added to an understanding of personal characteristics of consumers who chose a specific coffee brand: Nescafe, Maxwell or House Coffee
(McKeachie 1952)	To explore the influence of product consumption in personality formation	The study involved an experiment and interviews with six female and male students	The study showed evidence for existence of stereotypes. It highlights the impact of wearing lipstick on personality ratings
(Gardner & Levy 1955)	To discuss product symbolism and symbolic consumption	Conceptual/Theoretical	The paper sheds light on consumer motivations for product purchase and symbolism involved in product purchases
(Levy 1959)	To discuss the product meaning for consumers	Conceptual/Theoretical	Products have symbolic (personal and social) meaning as well as functional meaning for consumers
(Evans 1959)	To examine the influence of personality characteristics on product possessions	71 Ford owners and 69 Chevrolet owners were selected through a simple random sample. Edwards Personal Preference schedule was used to evaluate the predictive ability of the psychological factors of owning a car	The relationship exists between the owners' personality characteristics and brand image. The results suggest that brand image is not an independent phenomenon as it is usually referred to
(Tucker & Painter 1961)	To investigate the relationship between personal characteristics and consumer behaviour to determine the difference in personality traits and product interest and usage	Through administering the Gordon Personal Profile and a sales and marketing personality index to a sample of 133 students	The personality traits are often related to product use. Gordon Personal Profile is able to distinguish personality traits related to behavioural differences
(Vitz & Johnston 1965)	To examine the influence of personal aspects and the image of the product being used	Students between the ages of 18 and 22 (inclusive) participated in an experiment employing two measures of masculinity and femininity: the California Psychological Inventory (CPI) scale and Minnesota Multiphasic Personality Inventory (MMPI) scale. The respondents were instructed to write the cigarette	Irrespective of gender, the more masculine the personality of the respondents the more masculine they perceived their regular smoked brand is. The more feminine the personality, the more they perceived the smoked brand as feminine

		brand name of their regular use and rank 13 different cigarette brands from the most masculine to most feminine	
(Grubb & Grathwohl 1967)	To develop a framework for studying self and product symbolism	Conceptual/Theoretical	The study suggests a theoretical framework that how self is formed and product symbolism. Self is formed by the individual and by interaction with others
(Birdwell 1968)	To examine the relationship between an individual's self-image and choice of product	An experiment was conducted with 100 car owners using a semantic differential technique of measurement	The results show how an individual's image of self influences the choice of products. Several ownership classes hold different perceptions of a specific car type
Grubb and Hupp (1968)	To investigate the growth of self-concept and similarities of difference in self-concept of the same or different brand users	A questionnaire was administered with students using a modified semantic differential technique of measurement	Self-concept is developed from interaction and reaction from parents, peers, teachers and reference group. Personal and social dimensions form self-identity. Consumers of a specific brand will hold similar self-concept to the consumers of same brand and different self-concept from the consumers of a competing brand
(Green, Maheshwari & Rao 1969)	To examine the relationship between image congruity and brand perception	A questionnaire was administered to 45 students by n-dimensional rank order method and semantic differential scale	The results show that preference (for automobile models) is not positively associated to image closeness
(Dolich 1969)	To examine the congruence between self-image and product brand image	Two semantic differential measures were used to obtain congruence between self-image and brand image	The study sheds light on the actual self and the ideal self of individuals. The results show support for greater congruity of the self-concept and most preferred brands than with least preferred brands
(Hamm & Cundiff 1969)	To investigate the degree of satisfaction and the need for self-actualisation	The data were collected from 100 housewives from two middle class neighbourhoods	The study found that the 'most descriptive' products allow the respondents for unique personality expression and differentiation of self from others, whereas 'least like' products describe how respondents perceive their actual selves or their ideal

			selves
(Grubb & Stern 1971)	To replicate the Grubb-Hupp study (1968)	The data were collected from students and staff through differential scale questionnaires	Successfully replicates the Grubb-Hupp study and found support for the hypotheses
(Hughes & Guerrero 1971)	To investigate the role of self-related attitudes in buying behaviour	The experiment involved 58 businessmen and data regarding their attitude towards themselves, their first choice of an automobile brand, their current automobile was collected semantic differential scale	The study challenges the self-congruity model and calls for expanding the model to include social congruity
(Morris, GP & Cundiff 1971)	To investigate the sex role identification and test the attitude of individuals towards familiar products considered to be a feminine product	223 male students responded to an experiment involving three instruments: Taylor's manifest anxiety scale, Gough's femininity scale and Osgood's sematic differential scale	The findings show support for their hypothesis on the interaction of sex role identification and manifest anxiety towards hair spray; considered by majority to have feminine appeal
(Ross 1971)	To test the role of actual self and ideal self in product preference	An experiment involved female respondents to semantic differential scales two product categories: automobiles and magazines	The results show that consumers prefer brands that are similar to their actual self. The actual self determines consumer preference more than the ideal self, irrespective of the product category (six brands of both products). The results did not show support for the hypothesis that ideal self determines more preference for conspicuous products
(Darley & Cooper 1972)	To understand social impressions and their effectiveness	The experimental study involved six male students, three wearing conventional dress with short haircuts and three wearing clothes like hippies, long hair, with beards, dungarees and old army jackets. These students distributed the political leaflets	The study established the impact of political campaigner's dress and appearance on campaign effectiveness. Irrespective of the demographics of passer-by shoppers, more people accepted the leaflets from conventionally dressed students than from the hippie-like students. Moreover, the majority of the votes were cast to the candidate supported by the conventional campaigners
(Hamid 1972)	To investigate the influence of dress and appearance on judgements	The experiment involved responses from 52 participants (26 females and 26 males). Four female students asked the strangers to participate as social objects acting as helper of	The study shows the impact of appearance on judgements. The respondent's evaluation of traits as traditional, friendly, religious, neat, self-

		experimenter. Makeup and whether the experimenter girl wore glasses was manipulated	confident and sophisticated attributes was affected by the presence or absence of makeup or glasses. The evaluations and ratings were dependent on the sex and dress of the respondents
(Landon Jr 1974)	To evaluate the relationship between actual self or ideal self and purchase decisions	Data were collected from 173 females and 179 males through questionnaires	The results show that individual factors and product related factors determine the influence of personal self-image or ideal self-image on purchase intentions
(Rosenfeld & Plax 1977)	To determine the relationship between product choice and personality characteristics	An experiment involved 118 females and 122 males and responses to personality and psychological items were obtained through questionnaires	The results show that irrespective of gender, the respondents who scored high on cloth consciousness are anxious and compliant whereas those who scored low are independent and aggressive
(Park & Lessig 1977)	To determine affiliation and identification with the reference group and the influence of reference group on brand choices	Sample involved housewives and unmarried university students. Data were obtained along informational, utilitarian and value expressive reference group influences	The findings showed the impact of three types of reference groups on brand choices. Housewives were significantly different from the student sample in terms of influence
(Woodside, Bearden & Ronkainen 1977)	To understand and increase awareness of the phenomenon of self-identification and social interactions	The experimental study involved students responding to projective techniques using shopping lists. The study compared images on serving marijuana, beer, bourbon and soft drinks at a small party with use of post-test only and control group technique	The results show significant differences among four groups on 14 dimensions
(Belk 1978)	To investigate the influence of visible consumption of products on social impression of consumers	The experimental study involved a student sample	The results show that others form impressions based on visible consumption. The study showed consistent differences in the impression formed of the consumers, even for moderately visible and subtle consumption
(Holbrook & Hughes 1978)	To investigate the characteristics of different product users	The study involved a sample of 100 housewives responding to the indirect questioning method introduced by Haire. The respondents were asked to evaluate the shopping lists that	The results show significant differences in the attributes of different product users. Respondents perceived convenience food users as

		differed in their inclusion of convenience versus natural foods and instant versus regular coffee	more busy, time saving, quick, fast working, friendly, outgoing, on the move, urban, imaginative, lively and adventurous
(Allison et al. 1980)	To investigate how sex and sex role perceptions influence product perceptions	An experiment involved 133 female and 174 male students responding to a questionnaire in three parts. The first part involved product presentation on a nine-point scale, the second part obtained female perceptions of 24 stimuli and the third part employed Bem' s (1974) sex role self-concept	The results showed that sex has important role in product sex typing and that masculinity and femininity are two separate constructs. 23 out of total 24 products possess significantly different masculine and feminine perceptions
(Holman 1980)	To investigate the symbolic meanings of products and social impressions	The study involved female students. 1,000 slides of female students were obtained unobtrusively over a period of one week. The final sample contained 392 different clothing ensembles. The respondents were asked to answer questions on impressions formed when they first meet with the person wearing an ensemble	The study adopts a communication paradigm and links cloth consumption and its impression formation. The results identified six different clothing messages and meanings
(Belk 1981)	To examine the product characteristics that symbolise personality	The study involved two experiments with students; experiment 1 asked respondents to rate 39 products. Experiment 2 examined three consumption cues to symbolise personality and social class	The study established that products characteristics symbolise personality. Expensive products that involved high involvement are more likely to be used in evaluating consumer personality
(Munson & Spivey 1981)	To test if brand perceptions and user stereotypes differ along consumer social classes	The sample involved females responding to an experiment	The results showed significant differences across upper, middle and lower social classes for product and brand user stereotypes
(Bearden & Etzel 1982)	To investigate affiliation and identification with reference groups and the influence on product and brand purchase decisions	A survey questionnaire involved convenience sample of adults (nonstudent) between the age of 31 to 35 years	The study showed support for the hypotheses and established the influence of reference groups on product and brand purchases
(Belk, Bahn & Mayer 1982)	To examine development trends towards symbolic consumption	The experimental study involved a student sample and an adult sample responding to colour photographs of houses and automobiles	The study compared the inferences about the same symbolic consumption cue across gender and social class
(Sirgy 1982)	To elaborate the importance of symbolism	Review paper	The study sheds light on the importance of symbolism and advises

			self-concept literature to include symbolism in consumer behaviour
(Solomon 1983)	To offer theoretical propositions for understanding product symbolism and the role of social identity and social roles	Conceptual/Theoretical	The study proposes that in order to shape their self-image and align behaviour with their social roles, consumers employ product symbolism (this study explicitly relates to Symbolic Interactionism Theory (SIT))
(Frank & Gilovich 1988)	To investigate the symbolic meaning cues can have for users in self-perception and others in social perceptions	The study involved experiments, statistical records and video recordings	The results showed how symbolic cues could affect the behaviour of user and others in a social setting. Even subtle cues, such as clothing colour, influenced individual behaviour. The study also shed light on the influence of different uniform colours on the behaviour of professional football and ice hockey players. Moreover, players in black uniforms were treated more harshly and penalised for actions that would be ignored if done by others
(Baran et al. 1989)	To test the relationship between consumption and social interactions	The study involved a student sample responding to experiments, including shopping lists	The study establishes how consumer products influence evaluations about the users; people evaluate the personality and character of the consumer differently based upon the list of supermarket purchases
(McCracken & Roth 1989)	To investigate product symbolism and the influence of social interactions	The experiment involved 360 respondents, aged between 17 to 52 years, responding to a set of five photographs. The respondents were asked to identify the well-formed messages from a range of stimuli that included both well-formed and badly-formed messages	In order to judge if clothing possesses language like properties and that clothing-language comparison is suitable for this or other product categories, the results establish the existence of code that informs individuals' effort interpretation
(Forsythe 1990)	To examine the role of appearance and symbolic meaning of clothing on perception of recruiters	The experiment involved two groups of subjects: 55 individuals in marketing and 54 individuals in banking. The method included video recordings of interviews for	The study combines symbolic interactionism and perception. The results show that applicants' dress influenced the perception

		management positions and applicant ratings	of interviewer about management characteristics of the applicants. The findings also show that irrespective of respondents' gender or occupation, the higher dress masculinity resulted in more favourable hiring recommendations and more favourable perception of management characteristics
(Bell 1991)	To investigate symbolic interactionism in terms of the impact of male apparel styles on social perceptions	The experiment involved an adult sample responding to male apparel styles (daring, conservative, formal and casual) and rating scale on traits: intelligent, mature, self-confident, sincere, popular or attractive	The results showed significant differences in the perception depending on the costume style
(Fram & Cibotti 1991)	To investigate the symbolic meaning of products and personal characteristics of consumers	In order to replicate the study by Haire (1950), the study sample involved women with children at a maximum age of 45 years	The product (instant coffee) originally found as a product used by lazy, poor planners and bad wives (Haire 1950), was found to be consistent with the needs of busy people
(Feinberg, Mataro & Burroughs 1992)	To investigate the symbolic meaning of products and meaning transfer to individual identity	The experimental study involved student sample	The study establishes a link across the selection of clothes to represents individuals, meaning transferred by clothing and individual identity. Clothing is capable of communication symbolic meaning and perception formation that is significantly related to individuals' views of themselves
(Leigh & Gabel 1992)	To elaborate the importance of symbolic interactionism and its influence on product purchases	Conceptual/Theoretical	The study sheds light on symbolic interactionism and the influence of reference groups on product purchases (This study also explicitly discusses SIT)
(Kleine III, Kleine & Kernan 1993)	To investigate the role of self in consumption behaviour	A student sample responded to Callero's (1985) four term version scale	The results showed support for the link between mundane consumption and one's self, as identity salience provokes a behaviour to use products associated with identity

(Englis & Solomon 1995)	To determine the influence of lifestyles and the affiliation or lack of it with reference group	The responses were obtained from a student sample, representative of homogenous white middle class community, through a questionnaire. The method involved a sorting task to identify lifestyle clusters and an open-ended product elicitation task	The study shows correspondence between the products used by consumers to develop a set of lifestyles that have meaning for them
(Dittmar, Beattie & Friese 1995)	To investigate the role of gender in social construction and buying products or considerations used in buying products	The sample involved mature students with adult consumer experience to respond to a mixed method study	The study developed a new model of impulse buying to predict that products are bought at the spot to reflect self-identity. Gender played an important role as men buy leisure items impulsively to show independence, whereas women buy symbolic and expressive goods related to appearance and emotional aspects
(Hogg & Michell 1996)	To investigate the influence of social interactions and consumption patterns	The study used a mixed method approach: quantitative and qualitative. Data were collected across a range of products in the first phase. The second phase discussed the results and sought confirmation with marketing managers	The study established a relationship between social roles, identity and consumption patterns
(Thompson & Haytko 1997)	To determine the impact of personal characteristics in relation to society	Data were collected through interviews with 20 volunteers of different background, age ranging from 20 to 30 years	The study elaborates how consumers use fashion in relation to ideological systems, self and society. Consumers use suitable fashion to fit and make sense of self-identity
(Holt 1997)	To investigate the social constellations of consumption and lifestyles	The ethnographic study involved interviews with 23 adults, along with observations	The study also showed that people use products as reflections of lifestyles
(Hogg 1998)	To investigate the role of negative choice in symbolic consumption	The study employed mixed method in three phases: paper and pen generative task, interviews and finally group discussion with students	The study establishes the relationship between roles and avoidance in symbolic consumption
(Oswald 1999)	To examine the role of consumption in forming ethnic identity	This ethnographic study involved observation, interviews and field trips among first generation Haitians	The study sheds light on ethnicity and cultural aspects of consumption. It elaborates how consumption plays a role in developing ethnic (Haitian-American) identity
(Shavitt & Nelson 1999)	To explore the influence of product	The study involved 123 participants to consider the	The results showed different consumer profiles

	attributes/benefits on personality traits	consumer of one of three product categories: utilitarian products, social identity products and multiple function products	for users of three categories. While the utilitarian product consumers are described in light of product related needs and demographics, social identity product consumers are described in light of their traits interests and activities. Finally, the users of multiple function products are categorised in terms of their traits and demographics
(Vigneron & Johnson 1999)	To review literature and combine concepts of prestige consumption	Conceptual/Theoretical	The study reviews the past literature and sheds light on prestige consumption
(Christopher & Schlenker 2000)	To investigate the relationship between material possessions (affluence) and the perceptual process of individuals	The experiment involved 150 undergraduate students who rated vignette character designed to capture six identity dimensions	The study found a link between personality factors, materialism and the evaluation of an affluent or not so affluent target person. Significant differences were reported between affluent and not so affluent target individuals in terms of success (intelligence, hard work, self-discipline) and lifestyle
(Simonson & Nowlis 2000)	To investigate the influence of individual differences and need for uniqueness on purchase decisions	A series of studies was conducted with 300 to 450 participants per study	The study showed that consumers who have high need for uniqueness and explain their decisions are more likely to make unconventional purchase decisions
(Jamal & Chapman 2000)	To explore and investigate the role and influence of belongingness to an ethnicity on consumption patterns	The ethnographic study involved observation of participants and interviews from two groups: people of Pakistani origin living in Bradford and the 'white' people of the local culture in Bradford	The study showed that feelings of belongingness to an ethnic community affects consumption choices, particularly food consumption
(Lamont & Molnár 2001)	To investigate how communities seek status and acceptance via consumption	The qualitative study involved interviews with marketing specialists of advertising agencies in New York and Chicago	The study highlights how Blacks use consumption practices to construct and confirm their collective identity
(Tian, Bearden & Hunter 2001)	To determine the role of consumers need for uniqueness and the role products play in	The study involved two samples: 273 students and another more heterogeneous sample contacted through a mail survey	The study links consumers' need for uniqueness and the role products play in their sense of identity

	consumers' sense of identity		
(Johnson, Schofield & Yurchisin 2002)	To investigate how visual and non-visual cues can form social impressions in different social settings	The study involved interviews with 41 women. Aged between 20 and 60 years	The results show the importance of visual and non-visual dress cues of self-perception and social perception. The results highlight participants' perception of accuracy in information decoding from dress cues, although sometimes accuracy is dependent on situation-related factors
(O'Cass & Frost 2002)	To investigate the symbolic attributes and their influence on status and feelings towards the brand	A student sample aged between 18 and 25 years responded to a survey questionnaire involving fashion, clothing and sunglasses product categories	The respondents showed positive feelings towards the brand when the perceived symbolic value is higher. Moreover, greater congruency between brand image and the brand user's image leads to greater perception of that brand to have status
(Fung 2002)	To investigate the role of cultural consumption in forming gender identity	The qualitative study involved interviews with five working-class Hong Kong females	The study shows how cultural consumption relates to and develops female identity
(Kjeldgaard 2003)	To determine the role of locality in young people's consumption and discourse of identity	The sample involved high school students. A multi-cited study following an ethnographic approach	The study showed the role of the locality in young people's discourse of identity and consumption
(O'Cass & McEwen 2004)	To test the relationship between consumer status and conspicuous consumption	A student sample of 18 to 25 years of age responded to survey questionnaires involving fashion, clothing and sunglasses product categories	The study showed that overall, males and females are similar in their status consumption tendencies. However, male consumers may be more materialistic than female counterparts
(Lindridge, Hogg & Shah 2004)	To examine the consumption patterns of ethnic women	The study employed Ethno-consumerist framework and the data were collected from four students through focus groups, followed by 10 interviews. Purposive and theory-driven sampling techniques were used. The age of the South Asian background females ranged from 18 to 25 years	The study elaborates on the consumption patterns of South Asian women in Britain. It highlights how the consumption of ethnic women manifests culture and ethnicity
(Thompson & Arsel 2004)	To investigate the identification with or lack of identification with impact of globalisation	The sample was drawn from regular consumers of six coffee shops from varied backgrounds, involving photographs and	The study showed how consumers use consumption choices to exhibit their view of

		interviews	globalisation. The study offers depth into consumption patterns and their meaning for consumers
(Patterson & Hogg 2004)	To determine the role of gender identity and consumption	The study involved interviews with four respondents (two females and two males) aged between 18 and 24 years	The study elaborated the phenomenon of gendered consumption symbolism. It identifies and establishes the salience of gender identity and its role in consumption and interpretation of products
(Escalas & Bettman 2005)	To study the influence of affiliation and identification with reference groups on symbolic consumption	The experiment involved 208 students	The results suggested that symbolic characteristics of reference groups are attached to the brand those groups are perceived to use. Associations are transferred from reference groups to consumers groups and consumers choose the brands that have meanings congruent with their self-image
(Cova & Pace 2006)	To study how social communities are constructed around products and brands	The case study employed multiple methods (e.g., interviews and document analyses, involving a web community 'my Nutella the Community').	The study showed a new form of social interaction and customer empowerment. It sheds light on how a virtual community built around a brand of convenience product influences the brand.
(Caldwell, Blackwell & Tulloch 2006)	To explore the role of cosmopolitanism and consumer orientation	The qualitative study involved in-depth interviews and photo elicitation	The paper increases the understanding of cosmopolitanism as consumer orientation
(Jantzen, Østergaard & Vieira 2006)	To investigate how product consumption can add to the psychological experience and identity	The qualitative study involved interviews with white middle class 22 women brought up and living in Denmark age ranged from 21 to 41	The study sheds light on how women's consumption of lingerie enhances their psychological experience. Women use lingerie to express social, inter-psychological identity and to thrill, an intra-psychological identity. By using lingerie, women symbolise publically that they are knowledgeable of the code and their self-esteem is enhanced. (explicit use of SIT)
(Wang &	To explore the	The experiment involved two	The results showed that

Wallendorf 2006)	relationship between materialism and consumer evaluation of purchases	studies; the first study recruited 211 students responding to questionnaire containing sunglasses and sweatshirts categories, the second study recruited a sample of 270 adults and analysed athletic shoes and automobiles as product categories	materialism is related to consumer evaluations of their purchases. Materialism is negatively related to product satisfaction, if the product category has high potential for symbolising status. However, materialism is unrelated to product satisfaction, if the product category has low potential for symbolising status
(White & Dahl 2006)	To explore the influence of dissociative reference groups on consumer preferences for different products	The paper involved three studies; the first study recruited students, the second study recruited 190 paid male participants from a university and the third study recruited 84 males to respond to a questionnaire. All three studies employed questionnaires as a research instrument	The study highlighted the role of dissociative reference groups in consumer preferences. Study 1 results depicted that male respondents showed more negative evaluation and were less inclined to choose a product attached to dissociative (e.g., females) reference groups as compared to a neutral product. Study 2 showed that these findings were moderated by type of product: public or private. Finally, study 3 showed that the findings are also moderated by public self-consciousness
(White & Dahl 2007)	To examine the influence of affiliation with and the identification with social reference groups	Experimental study involving students	The study established the greater impacts of specific out groups on consumer behaviour, compared with general out groups. The results show that products associated with reference groups have more impact on consumers' negative self-brand connections, product choices and evaluations than the products associated with general out groups
(Berger & Heath 2007)	To elaborate on and examine the social approach to divergence from reference groups	Four experiments involved survey tasks for participants. The first three studies involved students, whereas the fourth study respondents were recruited from a web survey database with a mean age of 38	The study established how choices could symbolise identities to the outer social world. Individuals are more likely to diverge from a majority in domains, which others use to infer identity
(Wattanasuwan	To explore the role of	The ethnographic study involved	The study explored and

2007)	gender and consumption in negotiating identity	fieldwork, close observation, diaries and interviews with six females students	shed light on the role of consumption in negotiating identity. The study in particular highlighted how rural women use consumption to negotiate their identity in cosmopolitan Bangkok
(Berger & Heath 2008)	To examine the role of a social approach to the divergence from reference groups	The study involved seven experiments; four experiments recruited student samples to respond to questionnaires, whereas in the fifth experiment, both the student and staff samples had to respond to a questionnaire. The sixth experiment recruited a student sample and the seventh experiment recruited respondents through a web survey database with a mean age of 32	The study shows that people diverge to ensure that others understand who they are instead of diverging to for better understanding of themselves to their own selves
(Franke, Keinz & Schreier 2008)	To understand the influence of perceived uniqueness of the product	The experiment involved 127 participants to respond to the questionnaire and in-depth interviews	The study postulates that perceived uniqueness of the product adds value beyond the functional value of the product
(Goulding & Saren 2009)	To explore the gender aspects in identity formation	The study followed a quasi-ethnographic approach involving observation, experience and 14 interviews in total	The longitudinal study explored multiple gender identities 'performed' in Gothic subculture
(Fugate & Phillips 2010)	To explore the gender-related aspects and product perceptions	The study involved a student sample to respond to questionnaires referring to masculinity and femininity of products	The results showed evidence for product gender perceptions

3. Symbolic Cues in marketing communication, advertising and packaging

The purpose of this chapter is to explain how symbolic cues contribute to symbolic consumption. Just like the use of endorsers in marketing communication, marketers employ symbolic cues (symbols and verbal cues) to attach and communicate symbolic meanings of the product to consumers. The meanings are transferred to the products and consumers can purchase such products to associate and portray symbolic meaning. As SIT explains the symbolic consumption phenomenon, it also sheds light on how symbolic cues are interpreted by consumers. After looking at the frequent use of symbolic cues in marketing communication, this chapter in particular, focuses on religious symbolic cues. The chapter concludes with a discussion on consumer responses to symbolic cues on product packaging.

3.1 Symbolic cues

Before discussing the use of symbolic cues in marketing communications, this section provides short definitions and concepts related to symbolic cues. While there are different definitions for different concepts, the definitions and concepts used in this thesis are from the reviewed literature.

In this thesis, symbolic cues can be symbols or verbal cues, whereby symbols are found in the shape of pictures and images and verbal cues are found in written (words) or language format (see Figure 3.1). A *symbol* is defined as a visual image that is loaded with significance in itself as well as in something else that it richly represents (Barnet 1979, 2011). Therefore, a symbol is a sign that represents an object that is intended or interpreted by an individual to represent the object. A symbolic sign does not necessarily resemble the object signified but gives meaning to the sign, which is developed by a particular culture. Similarly, *verbal cues* refer to

the use of words and language to convey implicit messages and meanings. If the message is transferred through the use of words and it conveys some type of symbolic meaning, it can be called as symbolic verbal cue. Symbolic cues have special meanings and these meanings are shared between the sender and the receiver. Different cultures can have different symbolic cues, for example, the Cross is associated with Christianity, the Crescent with Islam and the Star of David with Judaism.

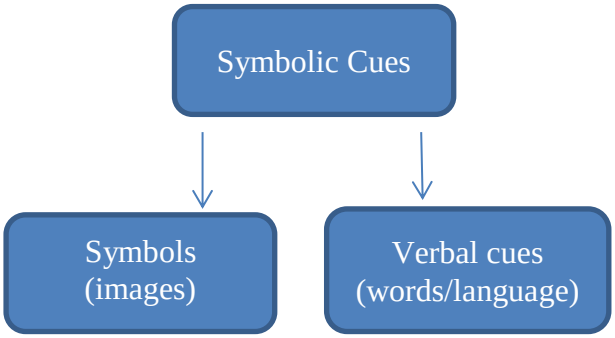


Figure 3.1 Symbolic Cues

The previous chapter (chapter 2) elaborated on the transfer of symbolic meaning by using celebrities to endorse products and companies. Similarly, symbolic cues are used in marketing communications to convey symbolic meanings. The association of companies and products through using celebrities for product endorsement and other marketing communications demonstrates the role of such celebrities in the transfer of symbolic meaning to consumers. Likewise, the associations attached with symbolic cues are transferred to products if symbolic cues are presented. Hence, an observation of advertisements shows how marketers use symbolic cues to communicate symbolic meanings. For example, the symbolic image of a cougar in a car advertisement can symbolise speed and fierceness to consumers. However, some receivers can view it as a sign of femininity depending on the perception and the interpretation of the receiver. Symbolic cues thus imply meaning according to the understanding of the receiver. Another example of the use

of symbolic cues is a television advertisement by a food company called Saarioinen. The advertisement depicts the idea of 'real food made by real mums' (Adforum 2014). The idea behind a symbolic slogan of the advertisement is to create a positive perception of convenience food, as the verbal cues in the advertisement symbolise the traditional role of a mother who cooks food to feed her family. Further, the advertisement subdues the use of convenience food to denote the busy single life and highlights the positive family-centred values. Hence, this advertisement would be more effective in more family-oriented cultures.

In a given culture, symbolic cues hold meaning as the people in that culture have defined these symbolic cues. As an example of employing specific cultural or religious symbolic cues, Figure 3.2 is a print advertisement of an investment company in a Muslim country. This advertisement employs both a symbol and a verbal cue as the Crescent placed on top left-hand side of the advertisement is the symbol of Muslims; the Crescent also indicates the month of Ramadan (fasting) for Muslims. Likewise, a verbal phrase in the middle of the advertisement on the right-hand side, 'Sharia Compliant Financing', hints towards the obedience of Islamic teaching regarding purchasing interest-free financial products.

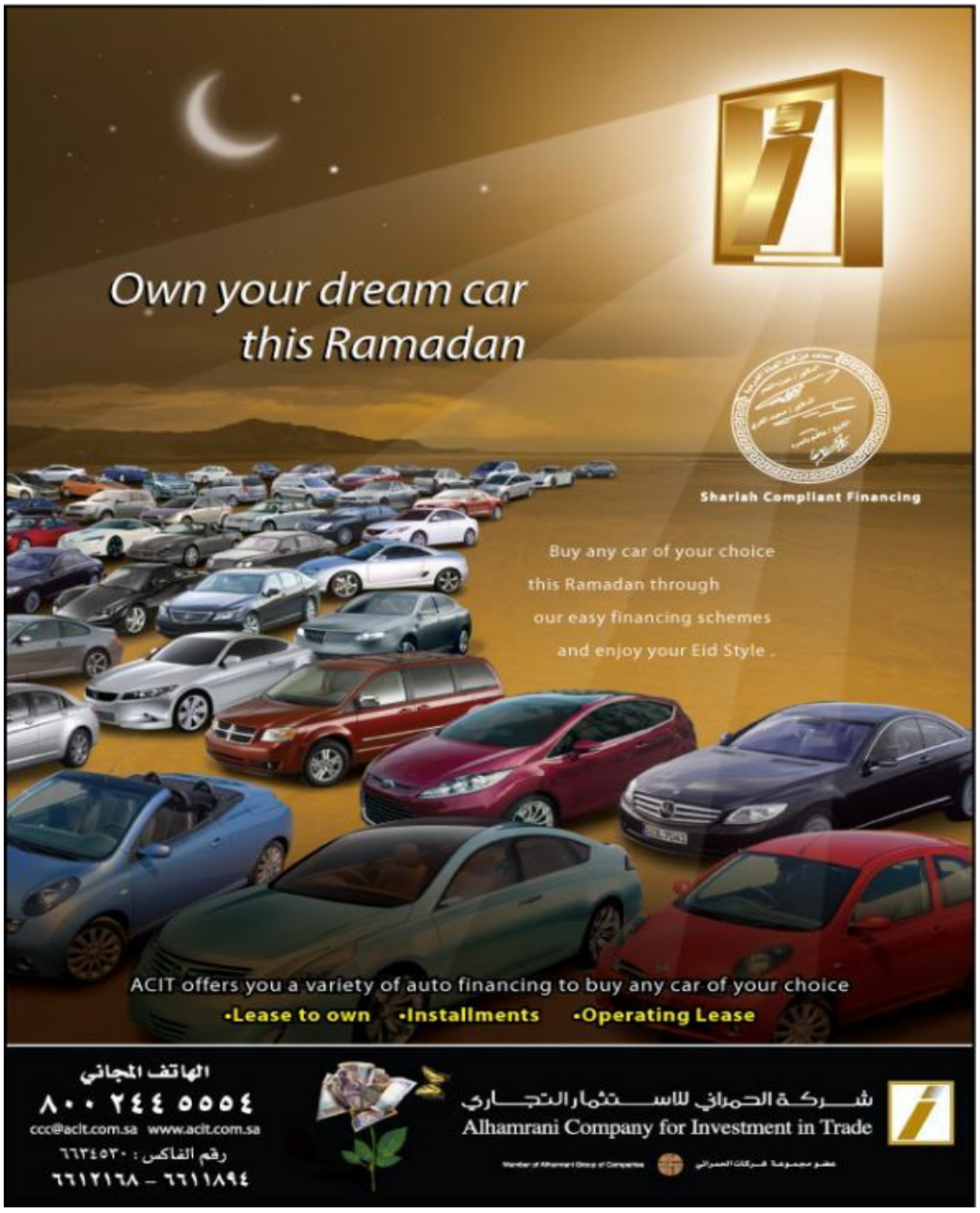


Figure 3.2 A print advertisement of financial services company

Apart from the advertising of financial products, where a lot of research exists on Islamic financing and Islamic banking, consumer goods companies also employ symbolic cues in their advertisements in Muslim societies. For example, Figure 3.3 depicts a print advertisement of Tapal tea. This advertisement uses a Crescent and individuals greeting in traditional clothing as symbols, whereas the local language Urdu (national language in Pakistan) is used to illustrate love and unity in the community.



Figure 3.3 A print advertisement of a tea company

In such advertisements, these visual cues (as listed above) convey greater meanings than their usual or general meanings, indicating that they are symbolic visual cues. The advertisements that depict and focus only on the functional meanings of the products miss the opportunity to associate the products with symbolic meanings and values. The mere focus of an advertiser on the product attributes can lead to weaker association as it would be easily copied by competitors (Aaker 2012). Marketers comprehend that consumers belonging to different cultures can use symbolic visual cues to prove their self-identity and be recognised as a member of the same cultural group. Therefore, for appropriate use of symbolic cues in marketing communications, marketers should have an understanding of how these cues are interpreted by consumers and how these cues transfer meanings to consumers. As the previous chapter discusses, SIT is used to understand symbolic

consumption, as this theory is useful for understanding the influence that symbolic cues have on individuals, which is elaborated in next section.

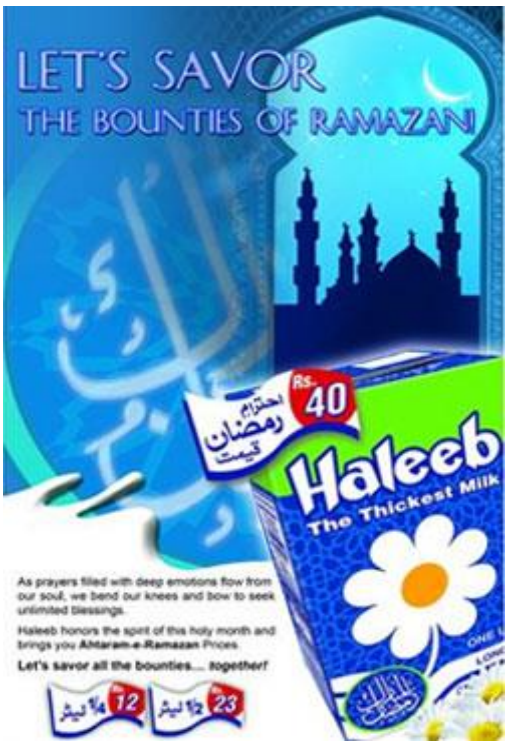
3.2 Symbolic cues and Symbolic Interactionism Theory

Advertisers and other marketing communicators, like package designers, may employ symbolic cues to refer to some meanings. There is a wide and frequent use of symbolic cues in marketing communication. Extending the role of religion to consumer behaviour, practitioners have even used religious symbolic cues to help market their products (Gökarıksel & Secor 2010; Story 2007). However, the importance of symbolic cues does not relate to the usage frequency, rather it relates to the power that symbolic cues have to transfer some meaning to the product. Thus, it is through the meaning of transfer that symbolic cues can add value to the product (McCracken, 1986, 1989). When any symbolic cue is presented in the message, the recipient of the message will first interpret the symbolic cue and then the message as a whole combined with the symbolic cue. The meaning interpretation of these symbolic cues in marketing communication is in line with SIT. Indeed, consumers as social beings learn symbolic meaning by living and interacting in a social setting. The marketing communicators consciously design and employ these symbolic cues that possess a certain meaning in society and culture. In this way, the marketing communicators benefit from the power of symbolic cues, as these cues communicate beyond the functional meanings and influence consumers. Scott (1994) stated that most visuals used in marketing communication are symbolic in nature. Therefore, the marketing communicators consciously employ these symbolic cues to convey not only the visual meanings, but also other concepts, ideas and feelings. The meanings of these ideas or feelings may be different for different individuals and in different situations. Scott (1994) explains further:

> … what I mean by 'symbol' here. On the one hand, I am proposing that visuals are symbolic on the basis of the fact that they are conventional rather than natural. But I am also proposing that they work in a highly complex manner that transcends merely pointing to objects. Further, this is a dynamic system of symbols, one that arises out of social interaction and thus, is capable of subtle differentiation and modification rather than of merely a one-to-one correspondence with an object (or a signified). (Scott 1994, p. 264)

Marketers deliberately combine a symbolic cue with a product in hope that society holds positive meanings about the symbolic cues used and that these meanings will be positively transferred to the product. For example, in Muslim countries (e.g. Pakistan and Malaysia) advertisers employ Islamic symbolic cues in advertisements (see Figure 3.4).







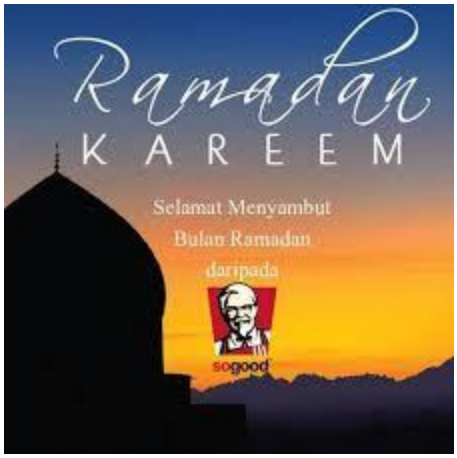


Figure 3.4 Examples of print advertisements in Muslim countries employing religious symbolic cues

The sender and the receiver of the message must learn the relationship between symbolic cues and meaning. Within one society and culture, symbolic cues may have the same and shared meanings for all the inhabitants of that society. For

example, symbols, such as the Cross, have certain meanings and importance in Christianity and as shown in the advertisements, the Crescent is a symbol for Muslims. Therefore, individuals learn the meanings of these symbolic cues by living and participating in society and being a part of that culture. When individuals see a symbolic cue with a message, they tend to recall what values, beliefs, and meanings are attached to that particular symbol (Blumer 1969). In this way, the relationship of a symbolic cue with its cultural meaning can be better understood through SIT. SIT considers the importance of an individual and others in society, and how they interpret and give meanings to objects around them.

Over time, objects acquire symbolic meanings in a society (Spears, Mowen & Chakraborty 1996) and individuals learn these meanings by observing others' reactions to these objects and by considering the expected meanings of those objects. Hence, the individual understanding would be a function of meanings developed by society, expected meanings and individual experience. In fact, these are the basic elements of SIT. When a symbolic visual holding cultural importance is combined with a product in an advertisement or on a product's packaging, the meaning of the symbolic cue that has been developed by the society can also be transferred to the product (Erdogan & Baker 2000). Consequently, consumers may purchase the product to portray their own image with those transferred meanings (Leigh & Gabel 1992). Yet, depending upon the individual's perception of self, the symbolic value of the product may exert greater influence on the purchase and consumption of the product than the functional value of the product (Mowen 1995).

As mentioned earlier, the use of symbolic cues in marketing communication, via advertising or product packaging, may influence or add to the symbolic value of the product. Combined with this phenomenon, consumers will purchase the product communicated by using a symbolic cue to express their self-concept to others along with associating themselves with that specific symbolic cue. Hence, consumers consider themselves to be in line with other individuals' expectations of the symbolic nature of the product.

Consumers may then purchase the product to portray some of the transferred meaning to themselves through consumption, as individuals use the symbolic meaning in products to associate or disassociate themselves from others in the society (Leigh & Gabel 1992; Wallendorf & Arnould 1991).

In a way, symbolic cues are used to represent something else and something special (Barnet 1979, 2011). Figure 3.1 depicts an object, a sign and an interpretant, whereby the object communicates meaning, the sign is a symbolic cue used to communicate the object and the interpretant is the person's reaction based on the meaning derived from the sign (Bower 1981; Mowen 1995). In a marketing context, the object would be a product, the symbolic cues would be employed through the products package and finally, consumers would be the interpreters of the symbolic cues within the marketing communication.

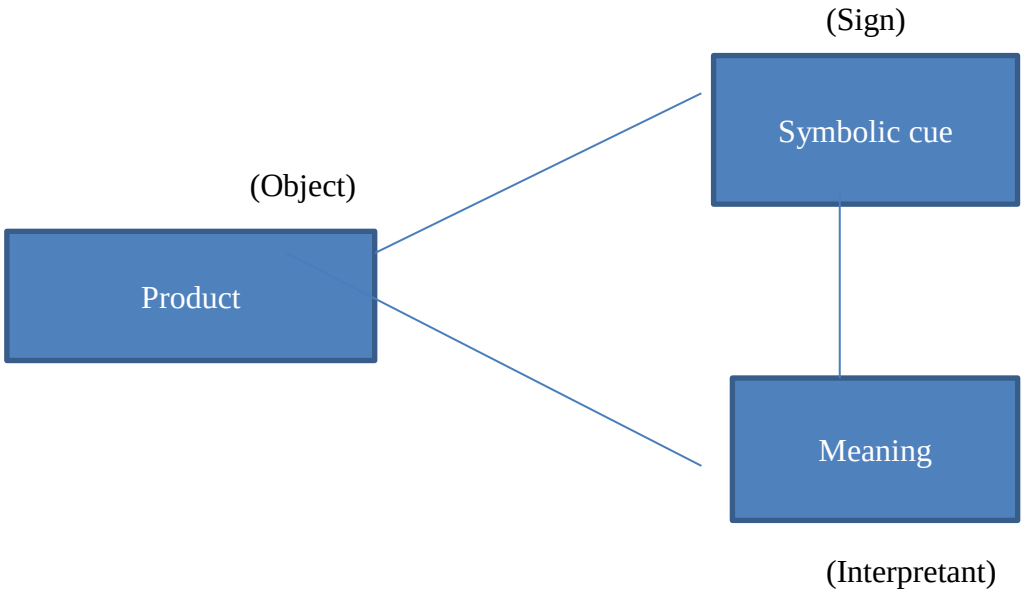


Figure 3.5 A product and symbol meaning analysis (adapted from Mowen & Minor 1998, , p. 85)

This simple analysis shows how consumers can attach and interpret the meanings of a symbolic cue used with a particular product or object. The way a product may serve as prior stimuli to consumption behaviour and the process is well explained by SIT (Solomon 1983). According to SIT, people will derive these meanings based upon their personal self, the meaning given to the product or object by the society and the meaning that the product or object is expected to possess.

Therefore, marketing communicators need to develop and communicate clearly how they want their product to be perceived by consumers (Aaker 1996, 2012). Brands can help consumers 'create and build their self-identities' (Escalas & Bettman 2005, , p. 379), as brands can be used to provide meaning, as cultural symbols can reflect consumer self-identity (Levy 1999; McCracken,1989, 2005).

Similarly, consumers can interpret the use of symbolic cues in marketing communication in different ways. Combining the symbolic nature of cues and their interpretation according to the SIT, a model is proposed in Figure 3.6. This model highlights how marketers and/or advertisers can attach symbolic cues to products, whereby the products receive an associated meaning through the use of symbolic cues. Finally, consumers interpret these symbolic meanings and portray these associations by purchasing the product and showing it to others in society.

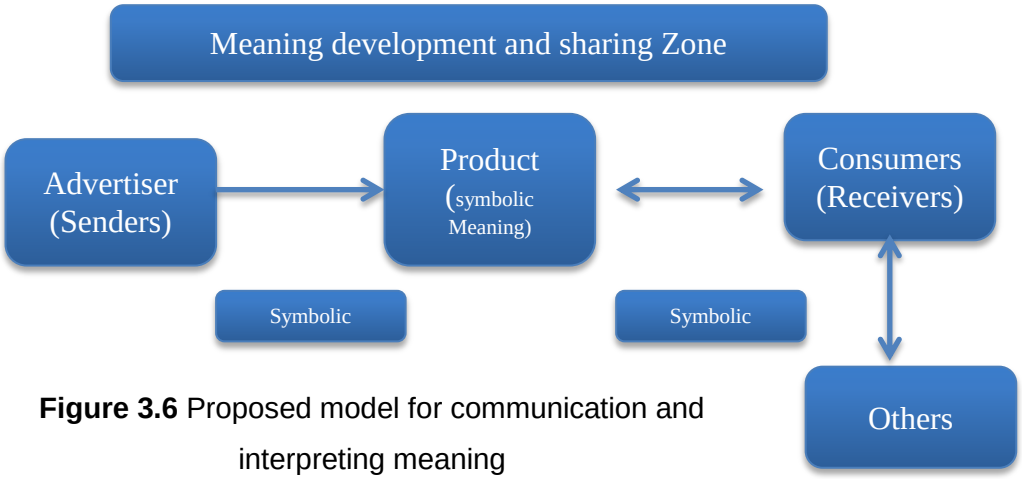


Figure 3.6 Proposed model for communication and interpreting meaning

An important aspect of the model shown above is the symbolic encoding by the advertisers and the symbolic decoding by consumers, which can be influenced by others in society. Marketers need to have a comprehensive understanding of the cultural values in a society in order to properly encode the symbolic meaning. Otherwise, the consumers of that society, targeted by marketers, would not appreciate the meaning of that particular product. In fact, SIT can be used as a guideline for marketers to understand the meaning development process of culturally constituted consumers. Therefore, this thesis employs the SIT to understand how the use of symbolic cues in marketing communications can influence consumer responses. The next section explains the general use of symbolic cues in advertising, followed by a specific reference to the use of religious symbolic cues in marketing communications.

3.3 Symbolic cues in advertising

As discussed, an observation of advertisements in print and electronic media shows how advertisers employ different visuals and images in advertisements. These cues used in advertising often demonstrate more than the product attributes and communicate complex meanings. If the visual contains both an intrinsic and an implied meaning, it can be called a symbolic cue. Symbolic cues play an important role in advertising because advertisers transfer symbolic meanings by associating a product with a symbolic representation of the product (Leigh & Gabel 1992).

Marketing managers understand the effects that occur through the use of symbolic visuals, as symbolic visuals appear to be an integral part of the planning and execution process of many promotional strategies. Indeed, the advertisement world is rich with these symbolic visuals. For example, advertisers have paired cars with different animals, a lion with a high-speed copy machine, an alligator with hand lotion and a lizard with an energy drink. Many researchers have investigated the advertising elements and have determined whether these elements are symbolic in nature or just visual elements. For example, Pieters and Wedel (2004) examined the attention effects of three key print advertising elements (i.e. brand name, pictures, and text). Their research found that pictorial elements were superior in capturing attention regardless of the size, while bigger text is superior in gaining incremental attention to the whole advertisement. Pieters and Wedel also discovered that the brand name was the most effective element in transferring attention to other elements in the advertisements.

Likewise, academic researchers have also conceptualised how consumers process these visuals (Scott 1994) and tested how consumers process indirect persuasion of visuals (McQuarrie & Phillips 2005). Further, they have investigated the effects of pairing different kinds of symbolic cues with different products in advertisements. The importance of studying relevant symbolic cues in the context of advertisements has been recognised in advertising and marketing literature, as many researchers in advertising have often explored how to correctly link symbolic cues with products, by comparing the effects of relevant and non-relevant cues. Such research efforts include testing the impact of relevant and non-relevant cues on consumer response (Miniard et al. 1991), the symbolic meaning conveyed by animals in advertisements (Spears, Mowen & Chakraborty 1996), exploring the

implications of visuals in advertisements (Phillips 1997) and the analysis of symbolism on celebrity images (Stafford, Spears & Hsu 2003).

The example of a food company in the previous section elaborated on how symbolic ideas can be communicated via advertising. Likewise, consider the television advertisement featuring a Chevy Blazer on top of a lighthouse and a stormy sea. These combined visual elements may not make sense for most people without further explanation or context. However, as these elements are combined in an advertisement they are understandable. The advertisement depicts that as the stormy sea crashes into the rocks below, the headlights of the Blazer are cutting through the darkness. A common interpretation could be that the vehicle's headlights are so powerful that it can help guide the ship to safety. Whereas, from a symbolic meaning perspective, consumers would think that the Blazer is like a lighthouse light, guiding sailors. Therefore, these meanings can be developed through symbolic association with lighthouses and how they provide safety and security in dangerous times. In this scenario, the Chevy Blazer on top of the lighthouse serves as a symbolic visual, conveying more of a complex meaning of providing safety to the drivers of Blazer in dangerous situations. In the same way, the examples of using the Crescent in advertising in Muslim countries (see Figure 3.4) hold relevance and symbolic meaning for Muslim consumers, as a Crescent relates to a specific culture (religion). Scott (1994) named such visuals as 'symbolic artifacts constructed from the convention of a particular culture' (p. 252).

In fact, most of the visuals employed in the advertisements possess multiple meanings and are more than reflections of reality (Scott 1994). Since individuals are able to determine and convey the complex symbolic meanings for the objects (Blumer 1969), marketers have employed such visuals in advertisements in almost every imaginable way (McCracken, 1987, 1990; Scott 1994). The previous section has shed light on another important research stream in the use of symbolic cues in advertisements and how symbolic cues obtain meanings in society.

Therefore, it is necessary for advertisers to determine how symbolic cues obtain the aforementioned meanings so they can be used to develop effective advertisements. The SIT is used to comprehend how symbolic visuals used in advertising acquire meaning (Blumer 1969; Mead 1938). In short, symbolic interactionism is predicated on the idea that objects derive symbolic meaning from individuals interacting with one another in organisations and in society. Thus, these

are social meanings that are formed in and through defining activities of society and/or culture. The meanings that are derived by any one individual are possible through the process of interpretation (Blumer 1969). The proposed model (in Figure 3. 6) underpins the zone of shared meaning between senders (advertisers) and receivers (consumers). A better understanding of the importance of symbolic cues to particular cultures can assist marketers in developing more effective and culturally coherent messages. Spears et al. (1996) state that interpretation of advertising cues occur through the culturally constituted world, composed of values, ideas, beliefs and the inherent meanings for specific objects. As a specific context of this study, the interaction between religion and consumer behaviour is discussed in further detail in the next chapter (chapter 4). The following section discusses the use of religious symbols in advertising.

3.4 Religious symbols in advertising

Almost all religious groups have different symbols to express their identity and adherence. As an integral part of a religion that serves to establish and facilitate closeness to God (Koenig, McCullough & Larson 2001), symbols can be used to uniquely identify particular religious groups, especially when it is difficult to recognise religious membership or adherence of an individual from other apparent or outward situations. Some common examples of religious symbols may be as the Cross, which is commonly associated with Christianity, the Crescent with Islam and the Star of David is with Judaism (Figure 3.7).

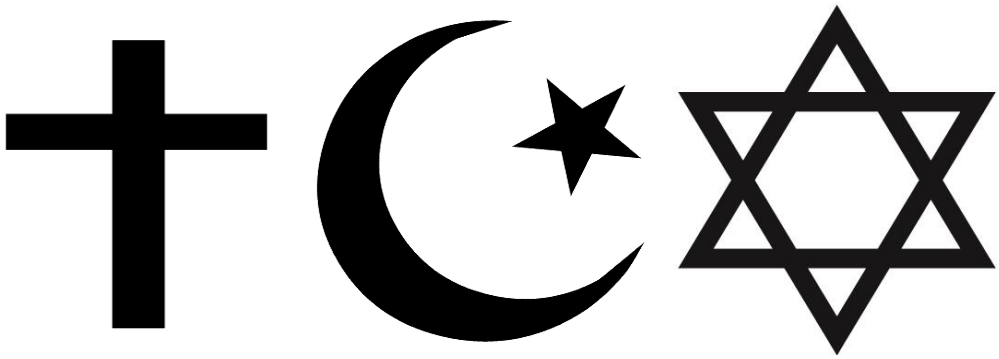


Figure 3.7 Religious symbols: Cross, a symbol of Christians; Crescent and star, a symbol of Muslims; Star, a symbol of Jews

The use of religious cues in advertising has a long and important tradition. Marchand (1985) analysed advertisements in the US media prior to 1950s and observed the frequent use of religious notions and icons in advertisements. More recently, Mallia (2009) suggested that the increasing use of religious cues in advertising may be because of intense competition, as religion provides a means to cut through the clutter and grab consumer attention.

The existing research on the use of religion cues in advertisements, however, mainly concerns cross-cultural comparisons or whether such use is relevant (Al-Olayan & Karande 2000; Henley et al. 2009; Mallia 2009). In one such cross-cultural study, Al-Oyan and Karanede (2000) analysed magazine advertisements in the US and Arab countries, and found that Arab advertisements usually pictured women in long dresses and mostly when products were relevant to them, such as cosmetics and fashion. The authors commented that the findings are consistent with the values of the Islamic culture, which requires modest dressing for women. Particularly, with women's fashion in Islamic societies, marketers need to design clothing that accommodates for religious as well as aesthetic and personal needs of Muslim women consumers. Consumers often evaluate fashion trends in the light of religious teachings and make their choices accordingly (Moors & Tarlo 2007; Rice & Al-Mossawi 2002).

In contrast, the inappropriate use of religious cues in advertising may be perceived as offensive, especially when the advertised products are perceived as irrelevant or controversial (e.g. alcohol) to their religion (Dotson & Hyatt 2000; Mallia 2009). Some examples are given below regarding the controversial use of religion and religious cues in advertising: In 1996, Benetton showed a priest and nun kissing each other in an advertisement and viewers were offended (Mallia 2009).

In 1998, a French poster for the re-launch of the VW Golf pictured a contemporary version of 'The Last Supper' with the line 'Let us rejoice my friends, for a new Golf has been born.' These billboards offended the French Bishops and they issued a writ against VW and DDB France (the advertisement creator). Approximately 10,000 billboards were removed and a donation was made to a Catholic charity (Penteado 1998).

In 2005, Bell Helicopter advertising for Osprey Cv-22 offended Muslims in the US by showing the US Special Forces attacking a mosque. This print campaign was published in three publications before it was removed (Rahman 2005).

In 2005, an advertisement was published by Sony PlayStation to celebrate its tenth anniversary. It was published in Italian newspapers and magazines and it offended Catholics and the Vatican. A Vatican official complained by stating, 'You cannot adapt the Passion of Christ for an advert for a video game.' The advertisement was pulled after complaints from Vatican. (Sony and Paddy Power ads upset Catholics 2005).

Other than these advertising examples, this outcome is also shown in Fam et al.'s (2004) multi-country study on the influence of religion on attitudes towards advertisements of controversial products (e.g. alcohol, cigarettes and weapons) from respondents from Malaysia, Turkey, Taiwan, China, Britain and New Zealand. Across all respondents in all countries, the findings indicated that more religious people were more likely to find the advertisements of controversial products offensive. Likewise, Dotson and Hyatt (2000) showed that consumers who were offended by the visual presence of a Christian Cross as peripheral cue in advertisements for pet health insurance reacted less favourably towards the advertisement as well as the brand.

Just as controversial products may have negative impacts on the perceptions of advertisements, the sensible and appropriate use of religious cues in advertisements may positively influence consumer perceptions of the advertisement and the advertised products (Henley et al. 2009; Taylor, Halstead & Haynes 2010). Following a parallel argument, examples can be given of advertisements that employed religious notions but provoked little or no criticism: An advertisement for the Sony Vaio depicted two monks watching a digital video disc (DVD) of the 'Three Stooges in the Himalayas' (Ives 2003).

In 2002, a television advertisement for Pepsi Blue intercut between monks at a monastery and the rock and rap band at the castle next door. The conflict ended in a melodious mix (Ives 2003).

In 2005, an advertisement 'Skating Priests' depicted a group of priests ice-skating on a pond. A young priest was asked to bring beer and he fell through the ice while returning. There were quick intercuts and reactions, and the superior advised the group to abandon the drowning priest and save the beer that had fallen and was floating away. Despite the commentaries of how it had offended Catholics, there was no public criticism. Instead the advertisement received a lot of media coverage and swept the advertising industry award shows of the year (Mallia 2009).

Likewise, in a field survey involving 275 adults, 85 per cent of whom identified as Christians, participants perceived higher (lower) quality for the advertised services (e.g., plumbing and electrical services) when the advertisements (did not) contain the traditional Christian Ichthys symbol (Taylor, Halstead & Haynes 2010, , Study 1) (Figure 3.8).



Figure 3.8 Ichthys as a symbol of Christians

The participants also reported higher (lower) intentions to use the service providers, whose advertisements (did not) contain the symbol. Moreover, the higher the religiosity level of participants, the more positive their quality evaluation of the service providers is and the greater their intentions to use the service providers.

As reviewed above, research has established the salience of religious symbols in advertising. A summary of the key studies is presented in Table 3.1 for a quick review. While the findings are mixed, the discussion so far mainly covered the religious symbols (images) as symbolic cues. The next section encompasses the current research on the use of verbal cues in advertising.

Table 3.1 Summary of the key studies in review (religious cues in advertising)

Author(s)	Key Objective	Method	Findings
Al-Olayan & Karande, 2000	To compare printed advertisements from the Arab world and US for similarities and differences	Content analysis of (1,064) Arab world and (540) US advertisements printed in magazines	Arab advertisements pictured women in long dresses and mostly when products were relevant, such as cosmetics and household products

Dotson & Hyatt, 2000	To test the influence of peripheral cue on consumer attitudes via Elaboration Likelihood Model	Convenience sample of 368 was exposed to one of four different advertisement versions. Religiosity level was measured by a questionnaire	Nature of the cue affects the response and thus attitude towards advertisement and brand
Fam, Waller & Erdogan, 2004	To examine the influence of religion and the religiosity level on consumer attitudes towards the advertisement of controversial products	Obtained 1,393 survey questionnaires from students from Malaysia, Turkey, Taiwan, China, Britain and New Zealand	More religious people were more likely to find the advertisements of controversial products offensive
Henley et al., 2009	To examine the effect of religious cues in advertisements on attitudes towards an advertisement and brand	222 university students responded to choice experiment	Religious cues in advertisements may positively influence consumer perceptions of the advertisement as well as the advertised products
Mallia, 2009	To determine the role of religion in advertising and see what makes an advertisement offensive	Analysed the advertisements from 1995–2007, which employed religious notions from print, television and internet	Factors such as level of religiosity, the content of the advertisement can make an advertisement offensive. The inappropriate use of religious cues in advertising may be perceived as offensive
Rice & Al-Mossawi, 2002	To develop a framework related to Islamic values and their managerial implications for advertising	Analysed the use of Islamic phrases in advertisements. Reviewed and combined literature from Islamic studies and marketing to come up with a framework	Suggested a framework for designing ads for Middle Eastern countries. The study found that modest approaches (modesty of dress) should be used in advertising and religious cues should be used with caution
Taylor, Halstead & Haynes, 2010	To explore consumer reactions to the use of religious cues in advertising	Study 1: 275 respondents in field experiment; Study 2: 131 students responded to a lab experiment	Respondents perceived higher quality for the advertised services when the advertisements contained the traditional religious cues

3.5 Religious verbal cues in advertising

Like symbols, consumers also consider language as a sign of culture and heritage. Therefore, the use of verbal cues in the form of local versus some foreign language has attracted the attention of academics and practitioners alike. Long ago, researchers established the symbolic value of local language for individuals. For example, Taylor and Giles (1976) showed positive effects in a bilingual setting, if the conversation occurred voluntarily in the respondents' own language. In their experimental study, the participants evaluated each other's personality as they conversed in different languages. The findings showed more favourable attitudinal change if participants thought their partners were choosing to communicate with them in their language voluntarily to show good will, as opposed to being advised (or pressured) to communicate in that language. In line with these results, Koslow, Shamdasani and Touchstone (1994) suggested that Hispanic consumers value advertising in their own language, not for the communication potential, but for symbolic value. Indeed, Hispanic consumers view those advertisers who use their language to advertise the product as caring and respectful of their culture and heritage.

Keeping in view that local language is a sign of culture and heritage, the populations of different countries are becoming more diversified and marketers should use such symbolic verbal cues or a standard message in advertising. Indeed, the choice of language as a verbal cue in marketing communication is an important decision for local companies as well as multinational companies, especially in bilingual markets. The following section reviews the key studies on the choice of language in marketing communication and its effects on consumers.

Many Asian countries (e.g. India, Pakistan, Malaysia and Singapore) have bilingual populations and many consumers in these countries can understand and are fluent in a foreign language (typically English) and at least one local or native language. Therefore, advertising and product packaging in these countries could be in local/native language (e.g. Urdu for Pakistan and Malay for Malaysia) or in English (e.g. see Figures 3.9 and 3.10). An analysis of advertisements shows that the use of English and/or a local language is a common practice in many countries.

Researchers in marketing communications have examined the use and influence of language in advertising (e.g., Krishna & Ahluwalia 2008; Luna & Peracchio 2001, 2005b, 2005a). Specifically, an established research stream is about the comparison of English as a standard language versus the local language in different countries (e.g., Gerritsen et al. 2000; Gerritsen et al. 2007; Krishna & Ahluwalia 2008; Luna & Peracchio 2001, 2005b, 2005a; Puntoni, De Langhe & Van Osselaer 2009; Shoham 1996). Table 4.2 summarises such studies for a quick review. The research on factors and variables that are examined in the use of language can be divided in the following sections/parts.



Figure 3.9 Two advertisements in Pakistan, in English and Urdu



Figure 3.10 Coke advertisements in Malay and English in Malaysia

3.5.1 Psychological perspective

An established research stream takes into account the psychological underpinnings of consumers, in terms of their responses to the use of local language and/or foreign language. Researchers have compared the effectiveness of local language to the effectiveness of a foreign language. For example, the use of a particular language may increase advertising effectiveness in terms of recognition and recall of a particular advertisement and/or brand by consumers. Similarly, a few studies also investigated the relationship between the use of language and the emotions of consumers.

An early study by Shoham (1996) compared the use of English and a local language in Israeli television advertisements and discovered that localised advertising is effective (in terms of recognition, recall and believability of commercials). Therefore, considering the objectives of marketing communication to

increase recognition, recall and trust, this study shows that advertisements in local languages are more effective than advertisements in the English language. The constructs measured are very important, for example, recognition and recall of a particular brand increase the sale of the product. The limitation of this study is that the study only tested its theory in one country (Israel) and it included only one television commercial. Moreover, the preference for local language can also be attributed to other differences in advertisements including the brand itself, celebrities and the background of commercials.

Luna and Peracchio (2001) examined the processing of advertisements by bilingual consumers. These authors suggested that the use of bilingual consumers' first language in advertisements is more effective (in terms of recall) than their second language. This research conducted by Luna and Peracchio is also in line with a previous study by Shoham (1996), as Shoham discovered the preference for local language. However, the authors added that the congruity between the picture and text could be used to help increase the recall of second language in advertisements. The authors suggested that this finding might have resulted because visual cues reduce the impact of language asymmetry on memory.

Hornikx, van Meurs, and de Boer (2010) investigated the possible differences in the preference for English or a local language in print advertising. The authors recognised the difficulty of the English language as an important determinant of consumers' preference for English or local language. The findings suggested that the use of the English language could positively influence consumer attitudes, as long as the language remains simple. Therefore, one reason for the preference of local language can be that local language is easy to understand; hence, it is easy to recognise and recall. While these studies shed light on the importance of local language in advertising effectiveness, these studies mainly conclude that language is a vehicle to convey messages. Consequently, Luna and Peracchio (2001) found that image congruity also increased the effectiveness of second language. Later, Hornikx et al. (2010) attributed the effectiveness of local language to the easiness of understanding.

From a psychological perspective, another important phenomenon is the relationship between consumer emotions and the use of language. Puntoni et al. (2009) conducted a series of five experiments to investigate the use of language and its emotional intensity. The findings showed that respondents perceived the

messages in their local language in advertising as more emotional than messages expressed in English. Therefore, the use of local language can evoke positive emotions and can be associated with a sense of closeness in the community. This emotional attachment of consumers to their local language alludes to the importance of local language as more than a simple means of communication. Therefore, the words in local language can be considered as verbal cues, as verbal cues are 'messages transferred through the use of words which convey some type of a symbolic meaning'. The mentioned study by Puntoni et al. (2009) endorses this view of symbolic verbal cues as carrying meanings. Thus, the words in a local language can evoke associations that may not be evoked in the same (translated) words in a foreign language. The next section reviews some studies to elaborate consumers' language associations.

3.5.2 Language and its associations

An in-depth literature review reveals that words in a local language are charged with symbolic meanings. Further, local languages can have different associations as compared to foreign languages. For example, Gerritsen et al. (2007) compared the effectiveness of the use of the English language in advertisements to Dutch, German and Spanish advertisements on young women from Germany, the Netherlands and Spain. This extensive study found that there are different associations for different languages. The use of the English language was associated with modernity, as Spanish women perceived the product in the advertisement with the English language as more modern than the product in the advertisement with their local language for two out of the four advertisements. The Dutch women perceived the same associations, however for only one advertisement. However, the authors hardly found differences in the effectiveness of the English language compared to the local language. For three out of the four advertisements examined, there was no significant difference in the language used: English and local language equivalent. In one case, the Dutch respondents' attitude was significantly more positive for the use of all-Dutch language advertisements rather than for the English language advertisements.

In a different contextual background, Krishna and Ahluwalia (2008) investigated the effectiveness of local language compared to the English language with different companies (multinational versus local) and different types of products (necessity versus luxury). The results showed that the advertising language effects

for multinational companies and not for local companies. For multinational companies, respondents prefer a message in English rather than a message in their local language for a luxury product (i.e. chocolate) and a message in their local language for a necessity product (i.e. detergent). Hence, the use of the English language was again associated with sophistication and the use of the local language was associated with closeness and belongingness, as the study established how different languages could have symbolic meaning for consumers.

More recently, Hornikx, van Meurs and Hof (2013) investigated the circumstances where the use of foreign language is more effective than the use of local language. The authors examined the effects through the congruence between the language associations and the product advertised. For example, wine is associated and more congruent with the French language than beer. The authors found that use of foreign language is more effective for congruent products than for non-congruent products for all three languages: French, German and Spanish.

In another recent study, Nikerson and Camiciottoli (2013) examined the attitudes of Muslim consumers towards the use of Arabic and English languages in advertising texts in the United Arab Emirates (UAE).Overall, the findings suggested that the language used in advertising did not significantly affect respondents' attitudes towards the advertisements and attitudes towards the product advertised. However, the language influenced the perception of the product being advertised as basic or advanced. Contrary to other studies (e.g., Bhatia & Ritchie 2004; Gerritsen et al. 2000; Planken, Meurs & Radlinska 2010), the respondents in this study who viewed the product advertised in Arabic were more advanced than the respondents who viewed the same product in English. Moreover, the respondents viewed advertisement texts in English as a potential threat to their own language and culture.

The literature review thus far validates the assertion that language can adopt a symbolic meaning and that it has the power to communicate implicit associations to consumers. Like celebrity endorsers and as elaborated in the case of symbols, the use of symbolic verbal cues in marketing communications can possess symbolic meaning for consumers. These meanings are first transferred to the product and then the consumer purchases those products to symbolise an association with those meanings.

In summary, researchers have associated the use of the English language in advertising to attributes such as modernity, progress, quality and innovation (Bhatia 2000; Piller 2003), with a notable exception where researchers have found respondents' own language (Arabic) as a sign of modernity (Nickerson & Camiciottoli 2013). However, local language is heavily associated with closeness and belongingness (Krishna & Ahluwalia 2008; Myers-Scotton 1999, 2002). For example, as mentioned in the study of Koslow et al. (1994), the use of the Spanish language was associated with belongingness and respect for the Hispanic community. Considering the languages have associations for consumers, the following discussion highlights the choice and the use of language as symbolic verbal cues in this study's context.

While research in the use of language as a symbolic verbal cue, particularly in Muslim consumers' preference for and attitude towards the use of language, is rare, local language symbolises identity and group belongingness. The role and importance of language as a symbol of group identity and cohesiveness is established by sociological researchers (Baker 2011; Brass 2005; Simon 2008). Therefore, religious groups can identify and associate themselves with a particular language. Indeed media and literature depict certain languages as symbols of religious identities (Pandharipande 2006). For example, Arabic is the language of Islam and Quran. Apart from the Arab world, where Arabic is an everyday language, Muslims around the globe pray in Arabic and thus, Arabic is considered a sacred language. Muslims, even in the western countries spend a substantial amount of time and money to teach young Muslims Arabic for better understanding of the Holy Quran and religious teachings (Rosowsky 2006). The sacredness of the Arabic language was recognised by researchers where respondents said, 'Arabic is holy' and that 'Arabic is the language of the Muslims – that's how it was supposed to be' in a qualitative study conducted in the UK (Jaspal & Coyle 2010, p.23, p.23). The authors in that study found that Pakistani origin respondents in the UK positively evaluated both Arabic and Urdu and stated that these languages were associated with religious identity in religious evoked situations.

Urdu is a national language in Pakistan and has positive religious associations for Pakistani consumers. More importantly, this language is mainly derived from Arabic and Persian. Urdu is written in right to left in an extension of the Arabic alphabet. Therefore, the use of the Urdu language in marketing

communication can evoke the religious associations in Muslim consumers in Pakistan. A study by Nickerson and Camiciottoli found that Muslim consumers associate Arabic with modernity as compared to English in the UAE (Nickerson & Camiciottoli 2013). In the same study, the use of English in advertising was found to be a threat to the Arabic culture in the UAE (Nickerson & Camiciottoli 2013). Therefore, considering English as a sign of western culture and a threat to local culture, local languages can be more important for Muslims and they can elicit more positive responses to their use in marketing communications. Language being considered sacred and as source of religious identity, consumers can prefer communication in their local language. Pargament and Mahoney (2005, , p. 179) stated that individuals may 'go to great lengths to preserve and protect whatever they perceive to be sacred'. While the local language for Muslims can be associated with their local culture and heritage, the English language may be perceived to depict modernity and a higher product quality.

In the same analogy, the local language can have pertinent effects on consumers' choices. Urdu is used in religious speeches and evokes positive associations for Pakistani respondents (Jaspal & Coyle 2010) and the Malay language, the local language in Malaysia, allows for Malaysian Muslims to associate Malay with such positive associations and religious identity. As Malaysian Muslims consider '*bahasa jigwa bangsa* or language is the soul of nation' (Mastor, Jin & Cooper, 2000, p. 97), the use of Malay in marketing communications can symbolise belongingness as well as an expression of their self-identity. Although the use of Malay is extensive in marketing communications (see Figure 3.10) in Malaysia, little is known about the circumstances under which symbolic verbal cues are more important.

In view of these findings for Muslims consumers, the study is worthwhile to learn the circumstances in which Muslim consumers prefer the use of local language and where English is preferred. Therefore, this research examines how consumer responses to the presence of religious cues on product packaging may differ across products of different symbolic religious value. Therefore, these objectives of the study may be particularly pertinent for Muslims, as Islam is a code of life that determines and influences every aspect of a Muslims' life, including their consumption behaviour. A detailed discussion on the influences of religion and the influences of Islam is detailed in chapter 4.

While the above discussion reviews current research on the use and influence of symbolic cues and religious symbolic cues in advertising, little research has attempted to investigate how religious cues in product packaging can influence consumer behaviour. Yet, product packaging is known to be a powerful marketing communication tool (Underwood 2003), as advertising and packaging have different applications in marketing communications (Keller & Lehmann 2006). However, it remains unclear whether the effects of religious cues via advertising are similarly found in product packaging. Besides, studies on religious symbolic cues in advertising mainly concern Christian consumers and the use of Christian symbols. In extending research on religious cues in marketing communications, this study will examine the influence of Islamic symbols on Muslim consumers in a product packaging context. Therefore, the next section highlights current research in packaging attributes and the potential use of religious symbolic cues in product packaging.

Table 3.2 Summary of the key studies on language in advertising

Author(s)	Key Objective	Method	Findings/Summary
Holmqvist & Gro¨nroos, 2012	To examine the role of language in consumer and company interaction	Conceptual/Theoretical	Based upon the current literature, the study highlights the importance and challenges of language and offers 11 propositions in three consumer encounter situations: pre-encounter, during and after encounter
Hornikx et al., 2010	To examine the effectiveness of local or English language in advertising according to the difficulty of language	A pre-test involving 36 Dutch participants determined the difficulty of language. Easy and difficult slogans were used with six car advertisements in the main experiment	The results show that difficulty of a language affects consumer preference for the English language. Easy-to-understand English slogans were appreciated better than difficult-to-understand English slogans and Dutch. When English was difficult to understand, it was appreciated as much as the Dutch equivalent
Hornikx et al., 2013	To identify and explore the circumstances	150 Dutch participants evaluated a number of advertisements in which	Results showed that foreign language was more

	where foreign language is more effective in advertisements	the slogan was in a foreign language. The responses were tapped in terms of perceived quality, attitude towards the product and purchase intention. The foreign language was either congruent or incongruent with the product advertised. For multi-language comparisons, slogans in French, German, and Spanish were included in the study	effective for congruent (e.g. wine–French) than for incongruent products (e.g. beer–French)
Jaspal & Coyle, 2010	To examine the role of language in forming religious identity	The method involved semi structured interviews with 12 British born South Asian participants in England	The study sheds light on the role of language and highlights how it constructs religious identity
Koslow, Shamdasani & Touchstone, 1994	To explore the influence of ethnic languages in advertising in a minority subculture	The study involved a total 413 field interviews, which resulted in 367 complete interviews. The participants responded to either an English or Spanish questionnaire and were shown one of the four advertisements from complete English, complete Hispanic, or mixed language (English dominant or Spanish dominant)	The study showed evidence for the symbolic value of language as Hispanic consumers value advertising in their language, not for communication potential but for symbolic value of this language
Krishna & Ahluwalia, 2008	To investigate the effectiveness of local or English language for advertisements of local or multinational companies and the necessity or luxury of products	The experimental study involved one pilot study, four pre-tests and two main studies. All the experiments involved university students. The pilot study established context. While the four pre-tests developed and tested the stimuli, the two main experiments tested the framework and underlying process respectively	The results show that the choice of language affects the effectiveness of multinational companies' advertisements and not the advertisements of local companies. Further, languages have different associations and product effectiveness changes with the type of product
Liu, Wen, Wei & Zhao, 2013	To test the differences in advertising persuasion between a standard accent (the Mandarin accent) and a local accent the Cantonese accent) for different types of products	The pre-test was performed with 41 participants to identify high involvement and low involvement products. Finally, 160 students responded to a 2 (high and low involvement) x 2 (Mandarin and Cantonese) design, resulting in 40 participants for one condition	The results showed that in high involvement product advertisements, a standard accent (Mandarin) will enhance consumer brand attitudes and memory, whereas in low involvement product advertisements, a local accent will strengthen consumer brand attitudes and memory
Luna & Peracchio, 2001	To explore how bilingual consumers process advertising messages	The study involved pre-tests to validate manipulations and two main experiments to test the	The study showed that the use of the first language in the advertisements is more

		hypotheses. The respondents saw the advertisements in either Spanish or English and answered the scale items	effective (in terms of recall) than the second language. However, the congruity between the picture and the text can increase the effectiveness of the second language
Luna & Peracchio, 2005a	To examine the influence of code switching (mixed language in one sentence) on bilingual consumers' persuasion processes	The experimental study involved one pilot test to test the direction of code switching and the main study was conducted to tap consumer attitudes (product evaluation)	The study offered empirical examination of code switching. The study showed the code switching direction effect on persuasion and established effects of minority versus majority language
Luna & Peracchio, 2005b	To further explore the influence of code switching and the underlying process of persuasion	In both of the experiments (study 1 and 2), respondents were randomly assigned to one of the four experimental conditions. All respondents were either foreign-born Hispanics or first generation Hispanic Americans. The respondents completed the questionnaire in Spanish or English	The findings showed that code switching activated associations relevant to the language the slogan switched to. These associations influenced the valence of consumers' elaboration
Nickerson & Camiciottoli, 2013	To investigate consumer attitudes towards the use of English in advertising	Out of 640 questionnaires distributed in United Arab Emirates (UAE), 306 were completed. The questionnaire contained an advertisement either in Arabic or in English and respondents had a choice to select one	The findings showed that consumers did not differ in their preference for Arabic or English advertisements, however the product advertised in Arabic was perceived as more modern than the same product advertised in English. The participants viewed Arabic as a language of their culture and considered English as threat to their culture
Noriega & Blair, 2008	To investigate the language associations and influence of language in advertising on consumer thoughts	Study 1 involved 82 participants (enrolled an English course) who were randomly assigned to one of the two language conditions. Study 2 recruited Spanish surname subscribers to the online edition of a major metropolitan newspaper in the United States	The study established the differential effects of languages on consumer thoughts. Moreover, the relationship is moderated by the consumption contexts
Puntoni et al., 2009	To investigate the associations between language and emotions	The study involved a series of five experiments where the same messages were manipulated in different languages	The study established different associations for the local and English languages. The use of local

			language was found to be associated with closeness, as the messages in their local language were found to be more emotional than in English
Shoham, 1996	To investigate the effectiveness of standardisation of television advertisements	The field study involved responses to a set of three advertisements from 100 respondents. Effectiveness was measured in terms of recognition, recall, believability and purchase levels	The study found that adaptive advertisements (local language) were more effective than standard ones (English language) in terms of recognition, recall and believability

3.6 The importance of packaging

Dichter (1957) was the first to articulate the notion that product packaging could act as a silent salesperson to attract consumers. Thus, packaging plays a pivotal role in marketing (Clement 2007; Underwood 2003; Vazquez, Bruce & Studd 2003). Carefully designed packages provide physical protection to the objects enclosed and the information given to the customer. Packaging as the container of the product encompasses such attributes as shape, size, design, colour, signs and labels.

With advertising, consumers may view the advertisements in different places, such as on the television at home, on roadside billboards or on the radio while driving. By contrast, consumers' notice of product packaging most likely occurs at the point of sale and usually in retail stores. Moreover, consumers are more likely to view an advertisement longer than they would with packaging. Indeed, researchers argue for the importance of visual cues in brand choice because consumers are often under time pressure and give limited attention when choosing between competing brands (e.g Pieters & Warlop 1999). Kapferer (1995) suggested that with fast moving consumer goods, consumers are less involved and they often glance across the shelves. Consequently, they may simply base their choice on implicit cues, such as symbols on packaging, which require little elaboration (Herm 2011).

The role of packaging design in the competitive industry of consumer goods has increased considerably in the last few decades. New product development and marketing strategies have started placing greater emphasis on packaging design as a communication tool (Wedel & Pieters 2008). In the cluttered in-store environment of consumer goods, packaging design's role is essential, as it encourages direct contact with consumers during their shopping experience. Hence, product packaging plays

an essential role in helping buyers find the right product. It explains and communicates the product and finally, it affects buying behaviour over time (Rettie & Brewer 2000). Consequently, in the context of launching new products, managers are eager to know which packaging design would be optimal.

According to a study by Vartan and Rosenfield, over 80 per cent of all purchase decisions are made in-store (Vartan & Rosenfeld 1987). Another study showed that over 70 per cent of in-store decisions in supermarkets are made at the point of purchase (PoPAI 2001). Therefore, about two-thirds of all supermarket purchases have been decided on when consumers are actually in the store. Of department store purchases, about 39 per cent go unplanned and are probably influenced by in-store marketing stimuli (Weinberg & Gottwald 1982). In some product categories, the proportion of unplanned purchases is even higher, as Meyer (1988) reports 85 per cent for gum and candy, 75 per cent for oral-hygiene purchases and about 70 per cent for cosmetics.

In this light, it is not surprising that next to the role of mass-media advertising, there is increasing attention for the role of point of purchase marketing stimuli as it attempts to inform and persuade consumers. A recent survey interviewed shoppers regarding their first time purchase of a brand and found that the majority of the shoppers (33 per cent) purchased certain items because they noticed the brand during their shopping trips (Kapulski & Pinero de Plaza 2010). Resonating with these studies, Sharp (2010) contended that unless brands are noticed at the point of purchase, they are unlikely to be purchased. Therefore, from a consumer perspective, the success or failure of a package depends on the noticeability of that product's package. As Kardes (2001, p 29) suggested:

> Consumers only attend to a very small fraction of marketing communications to which they are exposed and that is available in the marketplace.

Collectively, these studies support the importance of packaging and justify the increasing trend towards allocating more budgets to packaging in order to influence decisions made at the point of purchase (Underwood 2003). Overall, the research in packaging design falls into two main streams based on the level of abstraction (holistic and atomistic).

The first established stream of research views, packaging design from a holistic perspective (e.g., Orth & Malkewitz 2008), mainly views packaging as a bundle of attributes that are blended into a holistic design (Blijievens, Creusen &

Schoormans 2009; Bloch 1995; Orth & Malkewitz 2008). Based on the psychological response to product form, it is argued whether the response to a product is found primarily on the linear processing of one product attribute at a point in time, or on the holistic visual perception of the product form (Bloch 1995; Orth & Malkewitz 2008). However, it is expected that holistic processing occurs first, which then leaves room for further processing of individual attributes of a product (Bloch 1995). Yet, even when one attribute alone draws attention, it can only be processed and assigned a meaning as part of a whole package design.

The second established stream views packaging design from an atomistic perspective (Silayoi & Speece 2004; Underwood 2003). This stream studies the effect of packaging attributes (such as colour, imagery, shape, size, logos and typeface) on consumer response (Underwood 2003). Some authors categorised packaging elements into visual attributes (e.g. graphics, colours, shape and size), informational attributes and technological attributes (e.g., Silayoi & Speece 2004). Others, regard graphics (e.g. colours, typeface and logos) and structural (e.g. shape, size and material) attributes as the main packaging design components that affect consumers' shopping experience (e.g., Underwood 2003).This stream of research then suggests that consumers have the propensity to be more responsive to visual attributes, such as colours, shapes and symbols (Sorensen 2014). As mentioned before, the current research rarely addresses the use and impact of symbolic cues on product packaging. Therefore, the next section highlights the importance of packaging attributes in general.

3.7 Packaging attributes

This increased emphasis on packaging has also attracted calls for more research into the effectiveness of package designs to help cut through the clutter of competing brands (Young 2002). Considerable research has established that the visual appearance of product packaging plays a very vital role in consumer preferences and choices (e.g. Bottomley, Paul A. & Doyle 2006; Creusen & Schoormans 2005). The important elements that shape the appearance of packaging include alphabets, colour, graphics, labels, logos and symbols. Effective and appropriate use of these elements can positively influence consumer purchase choice (e.g. DeRosia 2008; Peracchio & Meyers-Levy 2005). For example, Pieters and Warlop (1999) defined three salient

elements in packaging in their study of visual attention during brand choice: brand name, pictorial elements and ingredient (verbal) information.

An observation of the current product packages of current brands reveals that organisations frequently use symbols as well as verbal cues. For example, Cadbury used a Muslim symbol, the Crescent, on its chocolate packaging (see Figure 3.11). In Figure 3.11, Cadbury not only used the Muslim symbol, it also shaped the product (the egg) to symbolise Christianity during Easter. Considering Australia, a multicultural society with a diversified population, Cadbury combined two religious symbols to accommodate for these differences.



Figure 3.11 Cadbury employing religious symbols on its packaging

Similarly, as an example of verbal cues on product packaging, a dairy product company in Australia (Dairy Farmers Australia) used the word Halal on its fruit yogurt packages (see Figure 3.12). The word 'Halal' as detailed in next chapter (chapter 4) symbolises that the product is suitable for Muslim consumers. Despite the prevalence and frequent use of symbols and verbal cues on packaging, research in the packaging area is limited to other attributes, which are discussed next.

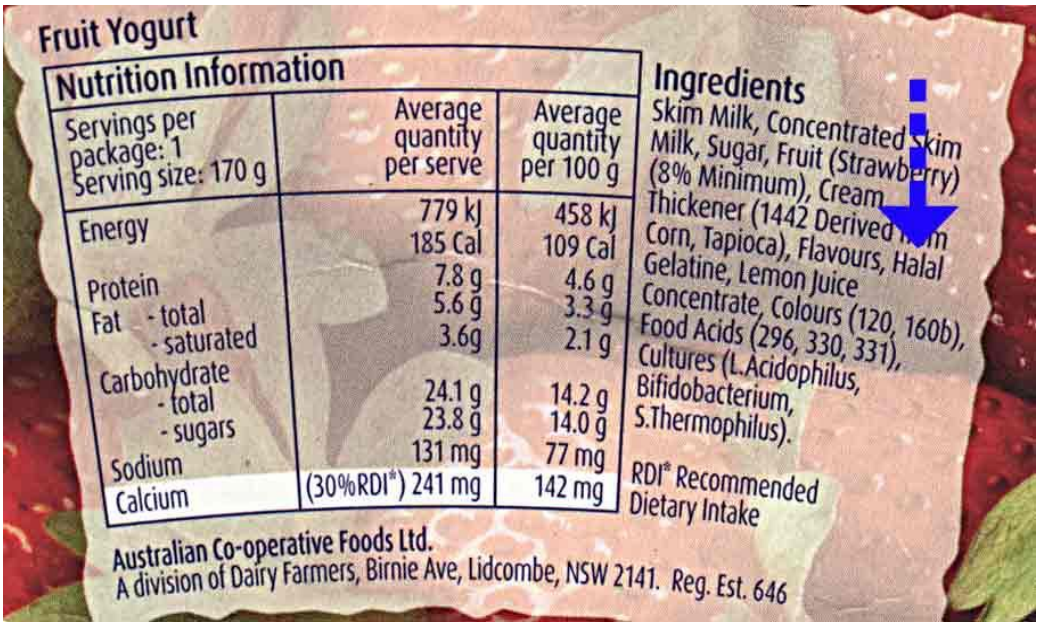


Figure 3.12 The package of a fruit yogurt company

Research has considered the symbolic association of the use of colours on product packaging. In one such study, Bottomley and Doyle (2006) investigated the role of colour in brand-image creation. Drawing on Park, Jaworski and Maclnnis' (1986) framework, the authors classified brands as functional products that fulfil utilitarian needs and sensory-social products that offer symbolic values to consumers. The authors then examined how consumers relate colours to the two product types and found that colours, such as black, grey, green and blue, were more appropriate for functional products (anti-freeze, car tyres, electrician services, kitchen rolls, power tools and solicitors). In contrast, other colours (red, yellow, pink and purple) were more effective with sensory-social products like amusement parks, chocolates, ice cream, nightclubs and perfume. Therefore, the study showed the symbolic importance of colours and that colours can communicate implicit meanings and symbolic values to consumers. Another experimental study by Doyle and Bottomley (2004) investigated the perceived appropriateness of fonts for product categories. They discovered that consumers view some fonts as more appropriate than others for particular categories.

Some researchers have explored the influence of the use of pictures on product packaging. Underwood, Klein and Burke (2001) examined the attentional effect of visual information on product packaging and discovered that visual product

imagery could assist a brand in gaining greater attention, but only for low familiarity brands. However, the authors suggested that this is just heightened attention and may not lead to product choice. Further, the image seems to increase salience to grab consumer attention but consumers may not use it as an evaluative cue.

In fact, the effectiveness of advertising and packaging goes hand in hand. Marketers need to deliver a coherent message across all marketing communications tools. Chandon et al. (2009) found that while in-store marketing works better to gain in-store attention, out-of-store factors, such as brand awareness or past usage, influence mainly product evaluation. This includes brand recognition, consideration and choice, which will assist in increasing the effects of in-store factors. Keller, Parameswaran and Jacob (2011) stated that packaging is often featured in television advertisements, taking up one-third of the time on average and even longer for new products and/or products with updated packaging. Therefore, while out-of-store marketing deals with the mental availability of a brand, recognisability represents the ability of a package to join the mental availability with the physical availability at the point of sale.

Consistent with the above studies, Van der Lans, Pieters and Wedel (2008) found that out-of-store marketing contributes to one-third of salience on the shelf, while the remaining two-thirds are a result of in-store marketing. The authors also state that this finding underlines the need to integrate advertising with packaging strategies. As a result, effective packaging with higher recognisability means to link out-of-store with in-store marketing to help a brand be recognised and considered, and thereby facilitate consumers in making easier and faster choices in consumer goods buying situations.

Extending the research on symbolic meaning, consumers associate with packaging attributes. Piqueras-Fiszman, Velasco and Spence, (2012) investigated whether consumers associate, implicitly and/or explicitly, specific flavours with specific colours on product packaging and assessed any differences between the cross-modal associations of consumers in two countries. More specifically, they examined consumers' cross-modal associations between the colour of a products packaging and its flavour varieties in crisps (potato chips) among Colombian and British consumers, using two methods. In a modified version of the Implicit Association Test (IAT), the stimuli consisted of green and blue coloured packets and flavours normally paired with these colours for a certain brand in the UK and

Colombia. In an explicit word (colour) association task, unbranded, grey-scale packets with three new flavours were shown instead. The results obtained from both tasks revealed two main kinds of associations between the colour of the packaging and flavour types: (1) A learnt association through a conventional pairing attributable to a specific brand, and (2) an association between a flavour and its potential packaging colour, based on the colour of the primary named ingredients.

While the above studies exemplify research into the influence of visual elements of packaging on consumer behaviour (for more examples, see Clement 2007; Van der Lans, Pieters & Wedel 2008), none have specifically involved religious cues. Yet, symbols are an integral part of religion that 'act to establish powerful, pervasive and long lasting moods and motivations' (Geertz 1973, p.90), and are designed to facilitate closeness to God (Koenig, McCullough & Larson 2001). Apart from this theological approach, symbolic cues can also uniquely identify particular religious groups, especially when it is difficult to recognise religious membership or adherence of an individual from an apparent or outwardly situation. As epitomised before, a Crescent as a religious symbol is associated with Muslims, along with certain languages from a symbolic verbal cues perspective.

In non-marketing studies, the effects of religious symbolic cues were found to be immediate and non-conscious (Weisbuch-Remington et al. 2005). The authors conducted two experiments by using positive and negative Christian religious cues beyond the conscious awareness of respondents. The psychological and physiological responses were measured by measuring changes in cardiovascular patterns of respondents. Their findings suggested that the symbolic cues influenced both the psychological and physiological states of respondents under motivated performance situations.

In order to shed light further on the importance of religious symbolic cues (both symbols and verbal cues), it seems appropriate to develop a profound understanding of the influence of religion. Considering religion is important in consumer behaviour, the next chapter (chapter 4) highlights the interplay between religion, marketing and consumer behaviour. After, the detailed review of studies in this interesting area, the next chapter also discusses the SIT implications for Muslim consumers.

3.8 Conclusion

In summary, researchers have focused on how consumers derive meanings from products (e.g., Belk 1988; Ekinci & Hosany 2006; Ekinci, Sirakaya-Turk & Preciado 2013; Leigh & Gabel 1992; Sirgy & Su 2000). The way consumer attach and interpret meanings can assist marketers in developing their communication strategies. Advertisers and other marketing communicators deliberately attach meanings to products (Ekinci, Sirakaya-Turk & Preciado 2013; Leigh & Gabel 1992). They communicate the functional benefits and meanings of the product by demonstrating what it is for and what it can do. Sometimes advertisers and marketing communicators can attach and communicate symbolic meanings to the products. For instance, Ekinci et al. suggested:

> Destination marketers and destination planners can use carefully selected colors, designs, music, or words as symbols for creating symbolic consumption experiences. (2013, , p. 716)

Hence, the messages based on the functional benefits of a product may motivate consumers to address the basic needs, such as the functional features of car like smooth driving can communicate comfort during travel. The symbolic messages may motivate symbolic desires like the desire for self-identity or the desire for association with a reference group. For example, the car of a particular brand may help the owner develop a self-identity and an association with a particular reference group. However, sometimes advertisers employ celebrities for their communication (Till, Stanley & Priluck 2008) or they design icons or symbolic cues to communicate the desired messages.

Symbolic cues can be images or pictures, called symbols or symbolic verbal cues. The main idea is that these cues are charged with meanings and implicitly communicate meanings other than explicit meanings. Marketing researchers have stressed the importance of symbolic cues and their use in marketing communications. Thus, advertising and other marketing communication vehicles employ such symbolic cues to portray symbolic meanings. Although the SIT is mostly applied to explain a social phenomenon, it can also be used to investigate the influence of symbolic cues, as it explains the meaning development process triggered by the cues.

One special type of symbolic cues is religious symbolic cues. In the discussion about religious symbolic cues, the chapter highlighted the current use and existent research on symbols, as well as verbal cues in marketing communications. The examples of religious symbols can be the Cross (for Christians), the Crescent (for Muslims) and the Star (for Jews). On the other hand, the examples of symbolic verbal cues can be words in a local language, where local languages can have associations and denote consumer identity. An in-depth literature review showed the use of symbolic cues and relevant research in advertising but research so far has not addressed the use of religious symbolic cues in packaging. Therefore, in order to address this gap, the next chapter discusses the influence of religion on consumer behaviour, as this influence is pertinent for Muslim consumers, where religion guides everyday life, including consumption.

4. Religion, marketing and consumer behaviour: A critical literature review

In order to explore consumer responses to religious symbolic cues on product packaging, it is relevant to discuss the link between religion and consumer behaviour. A vast majority of the world's population belongs to at least one type of religion (e.g. Buddhism, Christianity, Hinduism, Islam and Judaism). As the followers of these religions vary largely in their behaviour, including consumer behaviour, the level of religiosity also influences consumption patterns, mainly when the religion also guides consumption. In particular, Islam guides its followers in everyday aspects of life, including what to consume and what not to consume. Marketers nowadays strive to understand consumer behaviour by investigating factors that influence and motivate consumers to act in a particular way. Therefore, religion, marketing and consumer behaviour have an important relationship and it is pertinent to understand the interplay among these concepts.

This chapter starts with a general discussion about religion and marketing followed by reviewing some studies in the influence of religion on consumer behaviour. The next section relates to the specific perspective of this study and elaborates the guidance that religion (Islam) has for Muslim consumers and its influence on consumer behaviour. This section of the chapter briefly sheds light on the notion and concept of 'Halal' (allowed) for Muslims and a quick view on related legislation in Muslim countries.

The SIT explained symbolic consumption and the use of symbolic cues in marketing communication in chapter 2 and 3 of this thesis. The SIT framework is applied in this chapter to understand Muslim consumer behaviour and their responses to the use of religious symbolic cues on product packaging.

4.1 Religion and marketing

Religion is defined as 'a system of belief that recognizes a divine power (or powers) as the creator and ruler of the universe.' (Engelland 2014, p.2). Religiosity is regarded as one's belief in a God and a commitment to act according to the principles believed to be set by the God (McDaniel & Burnett 1990; Weaver & Agle 2002). Similarly, Koening, McCullough and Larson (2000, p.18) offered the following definition:

> 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.

A common denominator among various definitions of religion is that religion deals with and influences the personal and social life of individuals. Since Culliton's (1949) early study on the relationship between business practices and religiosity, research has established that religion can guide and even govern individual behaviour across all walks of life, including life satisfaction (Wilkes, Burnett & Howell 1986), ethical practices (Clark & Dawson 1996), moral reasoning (Glover 1997), social wellbeing (La Barbera & Gurhan, 1997), and self-control (Vitell 2009).

Literature considers religion as a subcultural dimension that affects individual behaviour, particularly how religious beliefs affect product choice (Abou-Youssef et al. 2011) Therefore, researchers have also extended studies beyond sociological domains to investigate how religion may similarly influence marketing (Kale 2004; McKee 2005; Mittelstaedt 2002). For example, Kale (2004) integrated literature from marketing and religious studies and contended that religion has contributed to technological inventions (e.g. printing machines and the internet), which in turn, have influenced marketing. The author stressed the need for an inter-disciplinary research and suggested that the formulation of macro-marketing strategies should involve religious scholars. Otherwise, the author warned, the sole material focus of these strategies may lead to deterioration in quality of life. Likewise, Mittelstaedt (2002) developed a comprehensive framework to show that religion affects markets and marketing systems through influencing political, institutional, social and competitive forces.

Although these studies alluded to the importance of religion's influence on marketing, there is a general lack of cross-disciplinary studies in religion and marketing, particularly in relation to consumer behaviour. Cutler (1991) analysed marketing literature over four decades and found only 35 articles having a religious focus, stating that finding academic research in this area is rare (Mottner 2008). Hence, this relative dearth could be attributed to the critical and sensitive nature of the topic (Alam, Rohani & Hisham 2011; Choi, Kale & Shin 2010; Hirschman 1982). Hirschman (1982) offered three possibilities for this scarcity, the first being the unawareness of the links between religion and consumer behaviour. Second, the perception within the research community that this topic is too sensitive to research and finally, religion is often taken for granted and overlooked by researchers because of its presence everywhere and obviousness in the lives of individuals.

In summary, religion is a system of beliefs that shape the worldview of its followers. Thus, it influences their behaviour towards objects around them, including products. Marketers then strive for understanding of such motives and beliefs in order to develop appropriate marketing communication strategies.

Despite the scarcity and mentioned issues, some researchers have attempted to explain how one's religious beliefs and, in particular, level of religiosity may influence one's consumption behaviour. The next section reviews key studies within this area.

4.2 The influence of religion on consumer behaviour

4.2.1 The importance and early research

Religion is identified as an important factor influencing consumer purchase decisions and marketing communications (El-Bassiouny 2014; Fam, Waller & Erdogan 2004; Rice & Al-Mossawi 2002). Studies that meld religion and consumer behaviour can be traced back to a series of articles by Hirschman (1981, 1982, 1983) regarding the relationship between consumers' religious affiliation and a number of consumption-related variables, such as innovativeness, store and brand loyalty, and criteria to make buying decisions. As one of the early researchers to identify the effects of religion on consumer behaviour, Hirschman (1982, 1983) showed that religious affiliation might explain purchase decisions beyond those explained by marketing

variables. Indeed, religion may be more salient than other demographic variables, such as age and income, in predicting consumer behaviour (McDaniel & Burnett 1990). The following studies elaborate on the interaction between religion and consumer behaviour and further exemplify the influence of religion on consumer behaviour.

Hirschman (1981), in her first study, investigated the influence of ethnicity and subcultural norms on consumer criteria to make purchase decisions. Thus, the author included religion as a cultural norm. Through survey questionnaires, 308 responses were obtained from students of four universities and 363 responses from adult consumers. Considering the religious affiliation of the respondents, the questionnaires were divided into Jewish and non-Jewish. The findings indicated that subcultural norms influenced criteria to make purchase decisions and key variables, such as innovativeness, store and brand loyalty. Although, the study established the mentioned influences of subcultural norms, it did not consider the cognitive systems and thinking patterns of different individuals.

The limitations mentioned above were addressed in a later study, where Hirschman (1982) tested the effects of differences in cognitive systems of different religions. A survey questionnaire tapped the responses of different religious groups. The respondents included 96 Catholics, 120 Jews and 114 Protestants. Hirschman then found that respondents from different religions had different cognitive systems, which led to differences in their consumption attitudes. Hence, this study is an explanation to the differences in behaviour of different religious groups, as the differences in thinking patterns and cognitive systems can be attributed to the differences in religious teachings of these religious groups.

Later, Hirschman (1983) did a detailed review of social sciences literature to develop a framework and link religious affiliation to personality structure, fertility and sexual mores, political views and socioeconomic conditions. The study involved three religious groups namely, Catholics (96), Jews (120) and Protestants (114). The study discovered that religious affiliation of the respondents influenced their personality structure, fertility and sexual mores. Similarly, there were associations between religious affiliation and political views and socioeconomic conditions of the respondents. Moreover, religious affiliation influenced the consumption attitudes of the respondents. Therefore, these studies led to a comprehensive framework to examine the influence of religious affiliation on a number of consumer-related

variables. In brief, the members of different religious groups have different thinking patterns and different personality structures; thus, these members exhibit different consumption patterns. Hence, religion is established as an important factor to shape an individual's personality and consumption. Consistent with Hirschman's contention, Sandicki and Ger (2010, p.19) remarked that:

> Religion, like other institutional and social structures, such as gender, class, and ethnicity, influences consumption choices and provides individuals with another set of resources and ideals for identity construction.

While the mentioned studies indicate the recognition and importance of religious affiliation in consumer behaviour, the importance and influence of religiosity is largely ignored. Therefore, the next section explains the influence of religious affiliation and religiosity and their links to consumer behaviour.

4.2.2 Consumer religiosity and behaviour

Religious affiliation relates to the adherence and membership of a particular religious group (e.g. Buddhism, Christianity, Judaism and Islam). The followers and believers of different religions identify with those religions. For example, all believers and followers of Islam are Muslims. Religiosity relates to the commitment of individuals to believe in and follow religious teachings. Religiosity is defined as an individual's belief in God and his or her level of commitment to act according to teachings of God (McDaniel & Burnett 1990; Weaver & Agle 2002). As religious affiliation influences individuals, religiosity also has an impact. An early study examining the role of religiosity in consumer behaviour was by Wilkes et al. (1986). The authors examined the relationship between a consumer's religiosity and their lifestyle constructs, such as 'satisfaction with life'. Later researchers, however, examined religiosity with reference to specific consumer behaviour practices. For example, Delener (1990) investigated the role of religiosity in consumer behaviour. The findings show differential effects with different levels of religiosity. Results showed that religious consumers were more sensitive to the price of products compared to non-religious consumers. Further, Delener (1990) described religion as one of the most important cultural influences on consumer behaviour, as his study alluded to the important impact of religiosity on consumer decision making.

Similarly, McDaniel and Burnett (1990) examined the influence of religiosity on consumer evaluation of the importance of store attributes. In a national survey of

550 respondents, McDaniel and Burnett found that the level of religiosity influenced the evaluation criteria as religious individuals attach a higher level of importance to the friendliness of, and assistance provided by, store employees. In the light of their findings, authors suggested that religiosity is a viable endeavour for future research.

Acknowledging the significance of religiosity in consumer behaviour, Smith and Frankenberger (1991) investigated the influence of religiosity on consumer shopping criteria, including product quality, social risk, price and brand. The authors tested the following five hypotheses in this study. First, younger consumers will score higher on religiosity than older consumers (age and religiosity). Second, consumers with high religious commitment will prefer high quality products (religiosity and product quality). Third, consumers high in religiosity will be more concerned with the social risk involved with their purchases than those who have low religiosity levels (religiosity and social risk). Fourth, highly religious consumers will be more loyal than less religious consumers (religiosity and brand loyalty). Finally, consumers high in religiosity will be more price sensitive than their less religious counterparts (religiosity and price sensitivity). However, the findings did not support the first hypothesis as the level of religiosity increased with age. Yet, hypotheses two and three were supported, as consumers high in religiosity were found to be more likely to look for product quality and were more worried about the social risk associated with the product bought than less religious consumers. Consequently, the effect of religiosity on brand loyalty was not significant, thus, hypothesis four was not supported. Finally, consumers that are more religious were prone to be more price sensitive than less religious consumer, which supported the fifth hypothesis. Hence, these findings were mainly in line with McDaniel and Burnett (1990), who have also endorsed the substantial importance of religiosity.

Sood and Nasu (1995) found that among the members of the same religious groups, compared to casually religious Protestants, devout Protestants were more concerned about price deals, considered more options and spread their purchases across more stores. Therefore, these behaviours reflect a relationship between religiosity and prudence in shopping behaviour whereby, the more religious consumers are, the more they tend to carefully evaluate their purchase decisions (Mokhlis 2009), and the more sensitive they are to potential negative outcomes of their purchases (Delener 1990).

The study by Sood and Nasu (1995) in the US was replicated by Mokhlis (2006) in Malaysia. Mokhlis (2006) also found that highly religious people were more likely to buy products on sale, were more open to purchase foreign-made products and referred others to stores with the lowest prices versus stores with the best assortment, as compared to less religious people. Consistent results on the influence of religiosity across different locations ascertain its merits in consumer behaviour.

Finally, Moschis and Ong (2011) summarised previous research on religiosity and consumer behaviour and the possible effects of confounding factors. The authors investigated the effects of religiosity on wellbeing and changing preferences of older consumers in Malaysia. The survey involved personal interviews with 645 adults, aged 50 and over, living in different regions of Malaysia. The findings suggested that there are positive effects of religiosity on wellbeing. However, there are differences across the three main ethnic groups of Malaysia: Malays, Indians and Chinese. Thus far, religiosity proves to be an important determinant of consumer behaviour and researchers in this area advocate additional research.

These studies show that consumer behaviour may differ for consumers with the same religion, but with different levels of religiosity. Indeed, a high (low) level of religiosity seems to relate to a higher (lower) degree of conservatism. Religiosity seems to shape the personality and self-identity of individuals (Choi, Paulraj & Shin 2013). Therefore, different personalities and desire for expressing self-identities are then reflected in their consumption patterns. The next section briefly explains the link between religion and self-identity.

4.2.3 Consumer religiosity and self-identity

Another important research stream in this area is the focus of researchers on religion as an element of identity and thus, they examine the role of objects and consumption practices in forming and communicating their religious identities (e.g., Hirschman & La Barbera 1990; Izberk-Bilgin 2012; Mehta & Belk 1991; Sandikci & Ger 2010; Wattanasuwan & Elliott 1999). For example, Wattanasuwan and Elliott (1999) examined Buddhist teenagers in Thailand and showed that they utilised symbolic consumption to develop and communicate a sense of 'Buddhist self'. Similarly, research was conducted on how Muslim women's veiling practices (Sandikci & Ger

2010) and consumers' attitudes towards global brands (Izberk-Bilgin 2012) were shaped by ideologies and marketplace forces and how these shaped their identities. Through an ethnographic study, Sandikci and Ger (2010) investigated the interplay between religion, markets and consumer behaviour and discovered how fashion practices guided by religion transformed into a routine practice and portrayed consumer identities. Likewise, Izberk-Bilgin (2012) through an ethnographic study postulated the importance of religion in consumer identity construction and their attitudes towards brands.

As explained in chapters 2 and 3, consumption practices, especially symbolic consumption, offer scope for expressing self-identity to others, as does religion. Shachar et al. (2011) put forth an argument that religion and brands may replace one another as a form of self-expression. In other words, people may use the brands of products that they consume or their religion to help project who they are or how they want others to perceive them. Testing the hypotheses in three studies using different samples, the authors found a negative relationship between religiosity and the degree to which consumers prefer branded over unbranded goods. However, the negative relationship existed only when products were conspicuous to others (e.g. clothes), and not with products that were inconspicuous (e.g. batteries). The reason is that conspicuous products (clothes) enable self-expression, whereas inconspicuous products (batteries) do not facilitate self-expression.

More recently, Choi and others (2013) investigated the role of religious affiliation and religiosity in consumer switching behaviour. The authors collected data from Korea and United States and reported that while consumer religiosity influenced their switching behaviour, religious affiliation was not a good predictor. The authors attributed the influence of religiosity to its influence on the personality of consumers. They argue that religiosity is a viable consumer segmentation variable, especially in countries where majority of the population follows the same religion (Delener 1990; Esso & Dibb 2004).

Along with personality and self-identity, the researchers have indeed covered the role of religiosity in many consumer areas. For example, an established stream the impact of religiosity in consumer ethics and questionable consume practices. Hunt and Vitell (1993), in their 'general theory of marketing ethics', include religion and the influence that religiosity has on the decision-making process. Later, a number of researchers in this area noted the impact of the religiosity level on

consumer ethics and ethical judgements (e.g., Bakar, Lee & Hashim 2013; Vitell & Paolillo 2003; Vitell, Paolillo & Singh 2005). For example, Singhapakdi, Vitell and Franke (1999) tested religiosity in their study of the predictors of moral intensity and moral philosophies. Singhapakdi and others used a sample of over 450 American Marketing Association (AMA) practitioner members and found that religiosity was a significant determinant of one's personal moral philosophy. However, religiosity did not significantly determine, nor was it associated with, moral intensity.

Another study by Conroy and Emerson (2004) found that religiosity (frequency of church attendance) was a significant predictor of ethical attitudes. However, other measures of religiosity (e.g. prayer frequency and self-reported religiosity) were insignificant in determining ethical attitudes. The authors also examined the influence of completing either an ethics course or a religion course on ethical attitudes. However, the courses were a weaker predictor compared to the religiosity of the individual. Hence, these findings clearly indicate that practicing religion is stronger in influencing the behaviour than merely studying the religion.

It is pertinent to mention that most of these studies involve Allport's (1950) conception of religiosity and employ Allport and Ross's (1967) religiosity scale. (This thesis uses the same conceptualisation and scale elaborated later in chapter 6). Allport (1950) perceived religious motivation as differentiated by intrinsic and extrinsic religiosity factors, whereby an 'extrinsically motivated person uses his religion whereas the intrinsically motivated lives his religion' (Allport & Ross 1967, p. 434). For example, in one such empirical study, Vitell et al. (2005) found that there was a significant influence of intrinsic religiosity on consumer ethical beliefs, though extrinsic religiosity was not related to ethical beliefs. More recently, researchers reported the mediating effects of other variables on the relationship between religiosity and consumer ethics (e.g., Bakar, Lee & Hashim 2013). In an empirical study by Bakar, Lee and Hashim (2013), they endorsed that religiosity stems more from intrinsic religiosity; however, the relationship between religiosity and consumer ethics is not straightforward. They also reported that the relationship was mediated by guilt. Nevertheless, the importance of religiosity is well established in consumer behaviour studies.

Overall, these studies depict the role of religion in the pursuit of identity goals of consumers and discuss how consumers use products and objects to develop and communicate their religious identities. However, similar to the other streams of

religious affiliation and religiosity, this stream of research also focuses on the role of religion in consumer behaviour in terms of individual experiences and expressions of religion.

In summary, this review thus far demonstrates the influence of religion on consumer behaviour. Just as understanding consumers' religious affiliations and practices would help marketers reach consumers in a better way, failure to understand these issues may lead to consumer backlash. Consumers who perceived that their religious beliefs were ignored were less brand loyal and more likely to complain (Swimberghe, Sharma & Flurry 2009). Moreover, these detrimental effects on loyalty and complaints were worse with customers who were highly committed to their religion. Therefore, in order to influence consumers' purchase decisions by tapping into their religious affiliations and religiosity, marketers have to ensure that their marketing communications are consistent with, or at least not disregarding, consumers' religious beliefs. Table 3.1 summarises key studies in this area. This phenomenon of religion's influence on consumer behaviour holds true, in particular, for followers of Islam, where religion guides every aspect of a Muslim's life. Therefore, the next section sheds light on the Islamic influence on Muslims' lives and the importance of religion to Muslim consumers.

Table 4.1 Summary of key studies in religion and consumer behaviour

Author(s)	Key Objective	Method	Findings
Bailey & Sood, 1993	To examine the influence of religious affiliation on shopping orientation	Through survey questionnaires, 349 responses were obtained from US consumers from six religious groups by comparing those from minority religion groups (Buddhism, Hinduism and Islam) versus those from majority-religion groups (Judaism, Catholic and Protestant)	While there were no significant differences in shopping orientation among majority-religion consumers, there were significant differences among minority religion consumers
Delener, 1990	To investigate the effects of religiosity on perceived risk in the purchase of durable goods	349 (204 Catholics and 145 Jews) useable responses were obtained through survey questionnaires	Religious consumers were less likely to make risky purchase decisions and were more sensitive to potential negative outcomes of their purchases
Esso & Dibb,	To examine the	1,000 households were mailed	Religious adherence

2004	influence of religious affiliation on self-reported consumer choices	survey questionnaires and 600 useable responses were obtained from three religious groups: Catholics, Hindus and Muslims	significantly influenced the self-reported consumer choices
Hirschman, 1981	To investigate the impact of ethnicity and subcultural norms on self-reported criteria to make purchase decisions	Through survey questionnaires, 308 responses from four universities' students and 363 adults consumers, both divided as Jewish and non-Jewish	Subcultural norms influenced variables such as innovativeness, store and brand loyalty and criterion to make buying decisions
Hirschman, 1982	To test the effects of differences in cognitive system of different religions	96 Catholics, 120 Jews and 114 Protestants responded to a survey questionnaire	Different cognitive systems of respondents of different religions and thus, different consumption attitudes
Hirschman, 1983	To develop a casual framework of the role of religious affiliation in consumption process and empirical test	Detailed review of social sciences literature to develop a framework and link religious affiliation to personality structure, fertility and sexual mores, political views and socioeconomic conditions. Responses were obtained from 96 Catholics, 120 Jews and 114 Protestants through survey	Personality structure, fertility and sexual mores, political views and socioeconomic conditions are influenced by religious affiliation. Similarly, religious affiliation influences consumer attitudes
McDaniel & Burnett, 1990	To examine the influence of consumer religiosity on consumer evaluation of the importance of store attributes	550 questionnaire responses were obtained measuring religiosity of the respondents and retail store criteria factors	The level of religiosity and not religious affiliation influenced the criteria
Shachar et al., 2011	To investigate the relationship between religiosity and consumer preferences for branded or unbranded products	Study 1: 45 individuals responded to a choice model experiment. Study 2: 356 individuals responded to an internet based survey of choice. Study 3: 122 individuals responded to a survey. Religiosity level was measured by questionnaires	Religiosity and brands may substitute one another as a form of self-expression. People can express themselves either via being religious or using known brands. Both provide room for self-expression
Sood & Nasu, 1995	To examine the relationship between religiosity, nationality and consumer purchase intentions	Japanese individuals completed 125 questionnaires and American individuals completed105 questionnaires about their religiosity levels and shopping behaviour	Devout Protestants were more concerned about price deals, considered more options and spread their purchases across more stores than casual Protestants
Swimberghe, Sharma &	To investigate the relationship between religiosity and store	425 respondents filled in questionnaires that measured religiosity, store loyalty and	Religiosity significantly influenced loyalty and complaint intentions.

Flurry, 2009	loyalty and complaint intentions	complaint intentions	Consumers, who perceived that their religious beliefs were ignored, were less brand loyal and more likely to complain

4.3 Islam and consumer behaviour

Islam is more than 14 centuries old and is the second largest religion in the world, with about 1.6 billion followers (Pew Forum 2011). Moreover, the population is predicted to rise to 2.2 billion (to 26.4 per cent of world population) by the year 2030 (Pew Forum 2011).

Alluding to the potential of the population as a consumer force, Muslim consumers have been referred to as the 'third billion', with China and India taking the top two spots (Chen 2010; El-Bassiouny 2014). Recent forums, like the International Conference on Islamic Marketing and Branding at Kuala Lumpur 2010, five Global Islamic Marketing Conferences (in Dubai and Abu Dhabi [UAE] in 2011 and 2012 respectively, Cairo [Egypt] in 2012, Istanbul [Turkey] in 2013, and Kuala Lumpur [Malaysia] in 2014) represent the importance and emergence of this new research area. These developments are not limited to the Islamic world, rather the Oxford Global Islamic Branding and Marketing Forum 2010 and the Cambridge University Reforms in Islamic Education conference 2011, alluded to the significance of Muslims as consumers and debated inter-disciplinary research in this area. Similarly, recently the *Emerald Journal of Islamic Marketing* and special issues of *Marketing Theory* (2013) and the *Journal of Business Research* (2014) on religion added to the scholarly understanding of largely overlooked consumer segments. The following section highlights the importance of religion for Muslims.

4.3.1 Islamic beliefs guiding everyday life

A key characteristic that distinguishes followers of Islam from those of other faiths is the importance and influence of religious teachings in their lives. Muslims do not distinguish religion from any other aspect of life, instead they see Islam as a complete code of conduct and way of life and treat the religious and secular aspects of life as one and the same (Lawrence 2000). Lamenting that religion is often

misunderstood, Rice and Al-Mossawi (2002) remarked that Islamic teachings even consider business activity to be a socially useful function and provide specific guidelines for managerial tasks within a socioeconomic system.

Within this study's context, the pronouncements of Islam also govern marketing and consumer behaviour. From a firm's perspective, selling products to consumers is holistic, in that benefits to society are considered alongside individuals' needs and satisfaction. For instance, in Muslim culture, promotional activities employing sexual images, particularly using female models, and exaggerated or even false claims are unacceptable practices. For consumers, this means that the perceived symbolic value of goods to society, as well as the social impact of goods, is constantly scrutinised and evaluated. Indeed, materialistic devotion to material needs and desires as a way of life is shunned, as this behaviour reflects a neglect or even total rejection of spiritual wellbeing (Richins & Dawson 1992). Conversely, product purchases and consumption should be consistent with Islamic values, as it is a reflection of obedience to God (Bashir 2002; Sharif 2003)

While religion is important to Muslims across the globe, this consumer group is important and has a huge potential for business organisations. According to a report by *Marketing Week* (Roberts 2010, p.1):

> Muslim consumers are a growing, influential and extremely loyal group, making them a desirable market for mainstream brands ... They're young, ambitious and worth at least $2 trillion globally.

Moreover the report states:

- About two-thirds of the Muslim population lives in 10 countries, of which six are in Asia and 52 per cent of the Muslim population is under 24 years of age.
- Halal is worth US$634bn, which is 16 per cent of the global food market, according to Nestlé.
- Islamic products and services that conform to Islamic Law are worth US$2 trillion annually.
- Muslims are predicated to account for 30 per cent of the world's population by 2025.
- These young and faith-oriented consumers have considerable purchasing power and possess huge potential for marketing managers.

Collectively, these points suggest that marketers operating in Islamic countries have to consider how their marketing communication efforts, such as via product packaging, may be attracting or alienating Muslim consumers because of religious symbolism perceptions. They further underscore the need to ensure that marketing communications adhere to socially accepted norms. Businesses, in a quest to grow and expand outside western societies, are engaging with Muslim societies and consumers. Examples include organisations that are developing products to address the specific needs of Muslim consumers (e.g. Fulla doll for Muslim girls as a substitute to famous Barbie doll) (El-Bassiouny 2014). As mentioned, the potential of this vast market has only recently attracted the attention of academic researchers. Nonetheless, still in its infancy, the field has covered a wide variety of topics in Muslim consumption. The key studies are discussed as below.

Adila (1999) for example, investigated Muslim consumers' objectives and means to achieve those objectives in Singapore. The author found that Muslims in Singapore are generally moderate in their spending. This moderation is in fact, the display of an understanding and influence of their religion. Similarly, Gayatri et al. (2005) found that Muslims' Islamic cultural values influence their evaluation criteria for restaurant, hotel and airlines service quality and therefore, the use of these services.

More recently, Alam, Mohd and Hisham (2011) offered a framework to understand the contextual factors and influences of religiosity on Muslim consumers. The authors investigated religiosity as a determinant of Muslim consumer behaviour in Malaysia. The findings of this study are consistent with Adila (1999), that religion is a source of reference for Muslim consumers and that they spend in moderation, according to the teachings of Islam. Further, religiosity of consumers moderates the influence of contextual variables. The authors also reported that highly religious consumers were less impulsive in their purchases. Likewise, Wilson and Liu (2011) noted that Muslim consumers with a high level of religiosity show high involvement in Islamic products.

Even though it is beyond the scope of this thesis, an important area worth mentioning is Islamic finance and Islamic banking, as Islamic teachings influence Muslim consumer financial services. A report by the Islamic Financial Services Board, Islamic Development Bank and Islamic Research and Training Institute (2010) stated that there was a growth in the Islamic financial sector by 20 per cent

since 2000. Similarly, International Financial Services London (2008, 2009) reported that the total estimated size of global Islamic financial assets is US$729 billion and about US$537 billion is in the form of Islamic banking assets. Since interest is prohibited in Islam, Islamic financials services are designed in compliance with Islamic teachings. The guiding principles are prohibition of interest, risk sharing, individual rights and duties, property rights, money as potential capital, prohibition of speculative behaviour, sanctity of contracts and other activities approved by Islamic teachings (IFSB 2010). Hence, the growth in the Islamic financial sector indicates Muslim consumers' adherence to Islamic teachings in product consumption internationally.

As mentioned before, Islam provides guidance in the day-to-day lives of individuals, including consumption. Islamic teachings advise Muslims to consume Halal (allowed) products. The next section details the concept of Halal and its implications.

4.3.2 The notion of Halal and Halal symbols

What is Halal?

Halal is an Arabic word that means permissible and lawful. It is used for those objects and actions that are permissible in Islam. Although it is mostly used for food and drinks, it encompasses other objects and acts, such as doing right deeds and earning Halal income. The opposite of Halal is Haram, which means prohibited. According to Islamic religious teachings, a Halal product is a clean product and does not include any ingredient from Haram (prohibited in Islam) animals or products (e.g. pork and alcohol). In the case of animal products, the animals should be from prescribed species and should be alive at the time of slaughtering. When slaughtering occurs, the animals should be slaughtered by evoking the name of Allah (God) only, preferably directed towards Holy Kaaba in Makkah (Saudi Arabia). The animals should be handled with care, well-nourished and rested before slaughter. The equipment involved in preparing, handling and packaging the product should be clean and there should be no interaction with any Haram product at any stage. The packaging should be from Halal sources as well. In short, the process of production, packaging and supply of Halal products is complex and Muslim consumers need to verify that the prescribed religious standards are followed. Therefore, Muslim

consumers in countries, where they can expect all kind of products available, are more attentive to the content and ingredients of their food (Bergeaud-Blackler 2005, cited in Bergeaud-Blackler & Bonne 2007).

Muslims generally follow their religious teachings even in the western countires. For example, a study found that 84 per cent of Muslims in France always eat Halal meat (Bergeaud-Blackler & Bonne 2007). Similarly, in Belgium, Muslims were found to be influenced by religion and follow complex motivations to make purchase decisions, compared to their western counterparts (Bonne & Verbeke 2008). Researchers identify that religious motivations, respect for animal welfare and religious identity go hand in hand for Halal meat consumption (Bergeaud-Blackler & Bonne 2007; Bonne & Verbeke 2006; Bonne et al. 2007).

Indeed, Halal is a complex phenomenon that involves the product itself, process operators and the supply chain. One cannot separate the product from how it is prepared and how it is distributed or handled in the supply chain until it reaches the end user. Therefore, in countries where non-Halal products are also available in retail stores, Muslim consumers can search for the Halal label and pay more attention to product packaging to ensure that it is suitable for their consumption. The Halal symbol is important in a sense, because it reduces risk, time and effort at the consumer level. Otherwise, if a symbol were not present, Halal would be difficult for consumers to verify. Similarly, if the product is certified as Halal by the concerned authority, it means that the prescribed procedures are followed. While Muslims around the world follow Islam and seek guidance from Islamic teachings, the different population structure in different countries has led to different consumer-related laws. The next section discusses an example of these differences.

Legislated versus non-legislated use of Halal symbols

In some Muslim countries, such as Pakistan where a majority of the population are Muslims (Population Census Organisation 2011, reported the figure as 96%), all sold products are mandated by law to be suitable for Muslim consumption. Even with animal food products (e.g. canned meat) or products that may contain animal ingredients (e.g. chocolate may have animal fats), these products need not essentially display a Halal (meaning permitted in Arabic) symbol. In such countries, consumers may be less attentive to the presence or absence of symbols on product packaging, since they know that only permitted products are sold.

By contrast, Islamic countries like Malaysia have a large non-Muslim population (Department of Statistics 2010, reported that about 40% of Malaysia's population are non-Muslims), and the use of symbols is compulsory for products that are suitable for Muslim consumption as Halal. Therefore, meat products or products that may have animal content must display a symbol indicating that they are Halal. Unless a Halal symbol is present, food products are assumed not to be suitable for Muslims. It follows that Muslim consumers in such countries may be more attentive to the presence of symbols on product packaging and possibly out of habit, the attentiveness to religious cues may even extend to non-food products that have no restrictions on religious grounds.

In many countries, organisations should put the Halal symbol on products that are suitable for Muslim consumption to assist with product purchasing. In countries where these laws exist, Halal certifying bodies issue certificates to the organisations, as these bodies verify that there is nothing Haram in the ingredients of the product and that the product is processed in an appropriate way as advised in the Islamic teachings (see Figures 4.1 and 4.2).



Figure 4.1 Examples of advertisements showing Halal symbols



Figure 4.2 Examples of advertisements showing Halal symbols, including a cosmetics company

Although, there are a few such differences in legislation in Muslim countries, consumers share many commonalties through a common bond of religion. This common bond offers numerous opportunities to marketers operating in Muslim markets who wish to target Muslim consumers, particularly through marketing communications. The next part of the chapter applies the SIT to understand Muslim consumer behaviour. Finally, this framework is applied to explore Muslim consumer responses to the use of religious symbols.

4.4 Applying Symbolic Interactionist Theory to Muslim consumer behaviour

To its followers, Islam is a way of life and Islamic teachings embrace every aspect of living, including consumer behaviour. However, while the religious teachings and principles broadly guide consumers in choosing products, the selection may vary within a range of products according to the different lifestyle and different symbolic identity of individuals. For example, a well-known teaching is about the modesty of woman fashion. However, female consumers may perceive or derive different symbolic identity from the same dress. Therefore, while one dress may be acceptable to a female Muslim consumer, another may find the same dress indecent from an Islamic teachings perspective. Indeed, this point is raised by Mick (1986) and others (Leigh & Gabel 1992), who asserted that the same product may relay different symbolic meanings to different consumers. Consequently, Muslim consumers may choose products that symbolise their religion as a reflection of their self-identity, as well as to communicate symbolic identity to others in society.

In line with the SIT, individuals can also identify themselves as a believer of any religion (Walker, Smither & DeBode, 2012). Human interpretation and behaviour will then depend upon the expectations of what is acceptable by society for that particular role as a member of that religion. The individual organises his conduct in line with the expectations of the other followers who are from the same religion. Just as the role of a parent demands that they are loving, caring and affectionate towards their children, the role as a believer of a particular religion demands them to act in line with other followers and follow religious norms. Hence, all these roles and situations influence individuals in assigning meanings and interpreting situations. In this way, self-identity and the behaviour of an individual

will be determined by the role he or she has in a particular situation (see Figure 4.3). Naturally, human beings want to develop and portray their self-identity and products can be used to build express self-identity (Escalas & Bettman 2005).

Society expects the believer of a particular religion to behave in accordance with religious teachings. Moreover, the understanding of the *situation* gives the individual an understanding of his or her 'place' in that situation (Hewitt 2000). After understanding one's place in a situation and viewing the situation from others' perspectives, the individual can anticipate the action of others and may be prepared for a reaction or interaction.

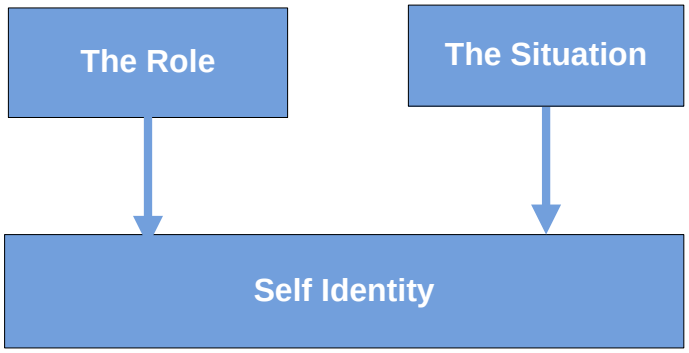


Figure 4.3 The effect of role and situation to develop self-identity

Further, the SIT suggests that consumers perceive and derive symbolic meanings from their consumption (Burbank & Martins 2009). Hence, consumers may choose products depending on what the products represent to them and to others in their reference groups, rather than primarily on the product's functionalities and performance. The chosen product serves as a channel or medium for consumers to portray themselves to others based on the symbolic meaning that society attaches to the product. As mentioned, the religious teachings and principles broadly guide consumers in choosing products; yet, the selection may vary within a range of products according to the different lifestyles and different symbolic meanings that they attach to different products.

Some researchers have contended that all products may not possess meaning other than the functional meanings (Belk 1988; Leigh & Gabel 1992; Levy 1959; Solomon 1983) and may not hold meaning for Muslim consumers, as Muslims view products in light of Islamic teachings.

In short, researchers find some products or product categories charged with meanings and these can provide expressive benefits. For example, leisure activities

and tourism are alluded to as 'charged with meaning' and thus good examples of symbolic products (Ekinci, Sirakaya-Turk & Preciado 2013, p. 712; Holbrook & Hirschman 1982). The notion that all products may not have symbolic meanings may not hold for Muslim consumers, as Muslims view products and consumption in light of Islamic teachings. Therefore, Muslim consumer behaviour can be explained by religious symbolism.

As previously elaborated, Islam is a way of life in that the Islamic teachings embrace every aspect of a person, including what they can and cannot consume. Therefore, Muslim consumers may derive symbolic meaning and benefits by consuming utilitarian products as well as expressive products (see Figure 3.4). The notion of Halal is not only limited to food products, to which it is usually referred to; rather, it encompasses every act of a Muslim. For example, Halal income means the income earned by hard work and from permitted sources. Therefore, gambling practices and earning interest are forbidden (Haram) in Islam, as these involve no hard work and effort. Similarly, Muslims can derive symbolic benefits by utilitarian products, such as food, as well as from symbolic products, such as fashion or clothing. In short, although it can vary from low to high symbolic value or benefits, all the products and (most of the) consumption of those products possess symbolic benefits for Muslims (see Figure 4.4). Hence, Muslims prefer products that symbolise their religion, as it is a reflection of their self-identity to others in society.

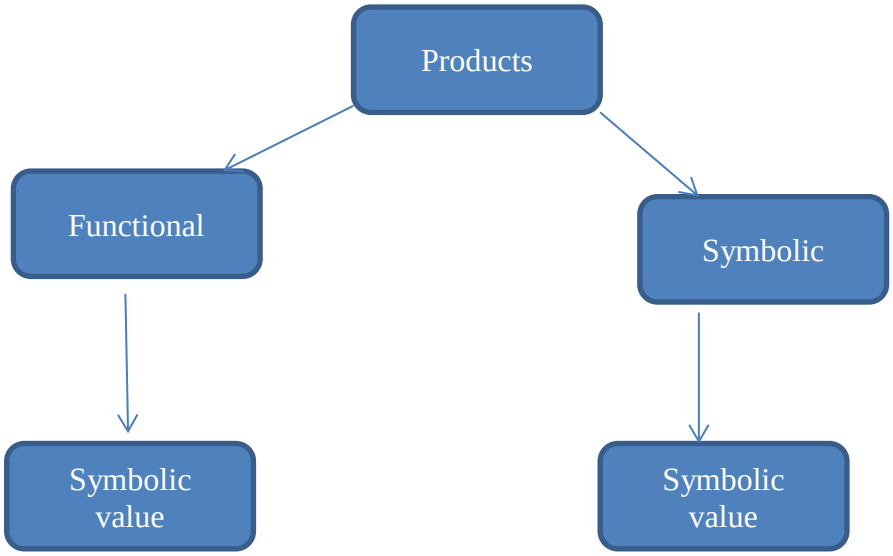


Figure 4.4 Product symbolism (proposed from religious symbolism)

Using the premises of the symbolic interactionism as a framework, there are connections between the symbolic meaning consumers derive from the objects and their behaviour to display self-identity. Although the self is the main focus of the theory, the theory asserts that even this self-identity is developed by individuals' interactions with others in society. Individuals develop self-identity through a complex phenomenon of personal experience and by living in a particular society. As Haggard and Williams state:

> We do not passively accept a given identity, rather we engage in a lifelong process of cultivating our own identities (1992, p. 8).

Haggard and Williams (1992) researched how the perceived identity of activities may influence the meanings assigned by individuals and their preference for activities. The authors examined the expression of one's identity through the role of activities by examining the nature and desire of identity images. Haggard and Williams then concluded that people participate in leisure activities based on their identity images and the desire to portray their images to others via those leisure activities.

Ours is a culturally constituted world. The meaning from this culturally constituted world is in fact transferred to consumer goods by marketers and advertisers, which are then transferred to individual consumers (McCracken 1986, 2005). As discussed in chapter 2, marketers attach symbolic cues to products to transfer meanings to consumers, as consumers purchase those products to express their own self through symbolic meaning. Following on these pronunciations, Muslim consumers may perceive religious symbolic cues as denoting their identity. Yet, if these religious symbolic cues are attached to the products, consumers may be attracted to those products and purchase the same to confirm to their self-identity and display this to others in the society. The next section details the proposed impact of religious symbolic cues on Muslim consumers and how they can interpret their meaning from a SIT perspective.

4.5 The effects of religious symbols with Muslim consumers

Within this study's context, the SIT means that Muslim consumers may prefer products that symbolically reflect their religion, as Islam is a way of life in that the

Islamic teachings embrace every aspect of a person, including what they can and cannot consume. Therefore, Muslim consumers may prefer products that symbolise their religion as a reflection of their self-identity, as well as to communicate that symbolic identity to others in society.

As the world's second largest religion, Islam has a long and rich history with symbols. With Islam, symbols (e.g. the Crescent, the eagle and the colour green) are derived from the religion's teachings and history. It is often necessary to understand these symbols in order to appreciate modern Islamic civilisation (Rodrigues 2008). For example, the Crescent symbolises the birth of a new nation and the commencement of Ramadan, the traditional fasting month for Muslims. Similarly, Muslims venerate the colour green because some believe that the colour symbolises birth, life and heaven and that the Prophet of Islam (peace be upon him) often used the colour.

Despite differences in regional customs and art, Islamic symbols are common across Muslim communities (Rodrigues 2008). Since Islamic teachings permeate all walks of life, there is supposedly no distinction between religion and a nation, in that a nation's sovereignty and laws are rooted in Islamic teachings. Consequently, religious symbols are usually on the national flags of Muslim countries, following the tradition of the Prophet Mohammad who hoisted similar flags as a symbol of sovereignty during battles in the early days of Islam (Podeh 2011). For example, the Crescent and the colour green are both on Pakistan's national flag.

This theory provides an explanation of how human beings develop their understanding of the world around them and how they develop and give meaning to their own identity. Similarly, it sheds light on the human reactions to different situations and objects in society. The essence of the theory can be summarised in three premises as follows:

- A human being acts towards things based on meanings that those things have for him or her.
- The meanings for things are derived from social interactions with others.
- These meanings are further refined or modified by interactions with these things (Hewitt 2000).

Each of these three premises assists in demonstrating the symbolic interactionism perspective of this study. These three premises are utilised in this as:

- A Muslim acts towards a religious symbolic cue on a product package based on the meaning that the symbolic cue has on the packaging for them.
- The meaning of a product with a religious symbolic cue on its package will be viewed by Muslims based on their interaction with fellow believers in society or a reference group.
- The purchase decision or consumption of the product can also explain why the manufacturer or package designer used the symbolic cue on the packaging.

Within the context of this study, Muslim consumers may prefer the product with a religious symbolic cue (e.g. Crescent as a symbol and local language words as symbolic verbal cues) on packaging, as the presence of religious symbolic cues would have some meaning to them. Consumers have learnt that symbolic meanings of the cues, in this case religious symbolic cues, occur in a Muslim society. Finally, the meanings may be further refined by knowing the reason behind putting the religious symbolic cue/s on the packaging and the consumption of that product. For example, consumers can perceive that the symbolic cue is used because a Muslim company manufactured this product or some particular process has been followed in the manufacturing.

Geertz (1973, p. 90) considered symbols as an important aspect of religion and defined religion as 'a system of symbols which acts to establish powerful, pervasive and long lasting moods and motivations.' The effects of religious symbols can be immediate and automatic (Weisbuch-Remington et al. 2005), yet their role in motivating consumers has largely been ignored in marketing communications research and product packaging. Indeed, Leigh and Gabel (1992) propose that marketing communications can effectively serve as vehicles for the process of symbolic meaning transfer.

4.6 Conclusion

The literature review in this chapter discussed the links between religion, marketing and consumer behaviour. Hence, the importance of religion for Muslim consumers and relevant concepts are detailed in this chapter, as this discussion led to an elaboration on the use of religious symbolic cues in marketing communications and the importance of religious symbolic cues for Muslims. An important theme in this

chapter is applying the SIT to Muslim consumer behaviour, and how consumers can interpret religious symbolic cues in particular.

Religious affiliation and religiosity of individuals influence their behaviour, including consumption behaviour. Existing studies on the influence of religiosity on consumer behaviour have covered many areas ranging from consumer purchases, consumer ethics to consumer personality and self-identity.

The impact of religion is even more important for Muslims because Muslims comprise about one-quarter of the world's population, providing a huge potential for marketers. Research on the influences of Islam as a religion and Muslim consumers has recently attracted the attention of academics and practitioners. A distinctive feature of Muslims from the followers of other religions is their adherence to religion and seeking guidance from religion in everyday life. Islam has the concept of Halal and Haram, guiding Muslims on what to consume and what not to consume. Despite cultural and legislative differences among different Muslim countries, they are connected through the same bond of religion that plays a key role in their life. While Islamic countries may have different consumers, they share a common bond of religion. Therefore, religion provides an opportunity for marketers to develop marketing activities to serve this single bond, particularly through the use of symbolic cues on product packaging.

Finally, as the SIT explains the meaning development and transfer process in symbolic consumption, it can be applied to explain how Muslim consumers behave. Further, the three premises of the SIT are applied to understand Muslim consumers' interpretation of the use of religious symbolic cues on product packaging.

5. Conceptual development

This chapter draws on literature review and the SIT to develop a conceptual model to examine Muslim consumers' attitudes and behaviour towards the use of symbolic cues on product packaging. This chapter adapts the SIT from its sociological domains and extends into the marketing field to study Muslim consumer behaviour. In doing so, the thesis advances academic research on consumer behaviour and the SIT, as well as applied research in marketing communication and product packaging. The huge potential of Muslim consumers across the world warrants a better understanding of this largely untapped and under-researched consumer potential. This chapter also develops a framework to see how similarities and differences among different Muslim countries may influence marketing communication strategies. Moreover, the literature review sheds light on the influence of language in advertising on consumer behaviour and the model developed within this thesis will explore the importance of language in product packaging in particular. Finally, the thesis takes into account the role of religiosity and models two dimensions of religiosity for testing consumers' attitudes towards the use of symbols on packages of varied religious value products.

The chapter starts with a brief discussion in section 5.1 about the linkage between religion, marketing and consumer behaviour. It then draws on the SIT to reason why Muslim consumers prefer a product with religious symbol/s presented on its package to a product package without religious symbol/s. The literature review showed different research implications for attitudes and behaviour and reasoned why a multi-method approach should be used to study attitudes and behaviour. Therefore, after postulating about consumer choices, it is believed that, Muslim consumers will hold positive attitudes towards product packaging that uses religious symbols.

Section 5.2 compares Muslim consumers' attitudes and behaviour towards the use of religious symbols on product packaging in two Muslim countries:

Malaysia and Pakistan. While the countries share a common bond of religion, the difference in labelling laws in these countries can provide interesting insights for academic researchers as well as practitioners. Hence, the framework considers how laws in a country can influence consumer attention towards a product package, and how consumers search for a label, which in turn influences marketing practices.

Section 5.3 explores language influences on bilingual consumer. Literature states that there are different influences and associations for local and foreign languages in advertising, whereby a model is used to investigate the impact of the use of two local languages (Malay for Malaysia and Urdu for Pakistan) and a foreign language (English) on product packaging for Muslim consumers. This section also notes how consumers may process packaging differently from advertising and what implications it can have for package designers and marketers.

Collectively, sections 5.1 to 5.3 develop ***a model*** to investigate Muslim consumers' attitudes and behaviour towards the use of religious symbols on product packaging and the use of local and foreign languages on product packages. The research context of the thesis (two Muslim majority countries: Malaysia and Pakistan) have different population structures, which suits the research objectives mentioned in chapter 1.

Finally, section 5.4 concludes the chapter by hypothesising that religiosity moderates the relationships between Muslim consumer attitudes and the use of religious symbols on product packaging. The two dimensions of religiosity, intrinsic religiosity and extrinsic religiosity can have different effects on consumer attitudes towards the use of symbols on products of high symbolic value and low symbolic value.

5.1 Choice behaviour and attitude towards the use of religious symbols

5.1.1 Religion, marketing and consumer behaviour

The role of religion has been extended from general social domains and has long been linked to marketing (e.g., Delener 1990; Esso & Dibb 2004). While this area is under examined (El-Bassiouny 2014), researchers allude to the important influence of religion, not only on individuals lives (La Barbera, Priscilla A & Gurhan, Zeynep

1997; Wilkes, Burnett & Howell 1986) but also on business innovations (Kale 2004). Therefore, in order to improve quality of human life, researchers suggest collaboration between marketing strategy developers and religious scholars (Kale 2004). Likewise, in consumer behaviour, religion is known to influence purchase decisions. For example, Hirschman (1982, 1983) concluded that religious affiliation explains purchase decisions beyond those explained by other marketing variables. While these early studies by Hirschman were limited to Jews and Christians, others have extended this stream to study the influence of Buddhism, Hinduism and Islam on consumers (e.g., Esso & Dibb 2004). In line with Hirschman's findings, researchers contended that religion may indeed be more salient than other demographic variables, such as age and income, in predicting consumer behaviour (McDaniel & Burnett 1990). More recently, Sandicki and Ger (2010, p.19) remarked that:

> Religion, like other institutional and social structures such as gender, class, and ethnicity, influences consumption choices and provides individuals with another set of resources and ideals for identity construction.

Despite the calls for cross-disciplinary research in religion and consumer behaviour, there is general lack of research that can be attributed to the critical and sensitive nature of the topic (Alam, Rohani & Hisham 2011; Choi, Kale & Shin 2010; Hirschman 1982). Moreover, instead of providing applied guidelines to practitioners, this research stream so far is dominated by conceptual and measurement issues, with inconsistent results (Henley et al. 2009; Vitell & Paolillo 2003). In fact, religion develops a world view of its followers (Engelland 2014) and it is, in particular, a leading cultural force for Muslims, where Islam provides a 'specific life outlook' and is closely linked to buying decisions (El-Bassiouny 2014, , p. 43). Therefore, it is worth to extend research on religion and consumer behaviour, especially to investigate the behaviour of Muslim consumers.

5.1.2 Religion and marketing communication

The use of symbolic cues is widespread in marketing communications. By employing symbolic cues or symbols in marketing communication, marketers try to transfer the meaning of that particular symbol to the product, as it is believed that symbols evoke certain associations in the minds of consumers (Leigh & Gabel 1992). Therefore, the frequent use of religious symbols in marketing communication

is not surprising, as such symbols can increase salience and the noticeably of the product (Mallia 2009). However, research regarding the use of religious cues in marketing communication is often overwhelmed by cross-cultural comparisons and the relevancy of the cues (Al-Olayan & Karande 2000; Henley et al. 2009). Only a few studies conducted so far have examined the use of religious symbols in advertising (e.g., Taylor, Halstead & Haynes 2010), and these are limited to Christian symbols. To the best of this author's knowledge, no published studies have attempted to investigate the use of Islamic religious symbols, particularly, on product packaging. Yet, product packaging is known to be a powerful marketing communication vehicle (Underwood 2003), as advertising and packaging have different applications in marketing communications (Keller & Lehmann 2006). Yet, it remains unclear whether the effects of religious cues via advertising are the same for packaging.

5.1.3 Product packaging and Symbolic Interactionism Theory

While the influence of visual elements of packaging on consumer behaviour is well established (for examples, see Clement 2007; Van der Lans, Pieters & Wedel 2008), none have involved religious cues. Yet, symbols are an integral part of religion that 'act to establish powerful, pervasive and long lasting moods and motivations' (Geertz 1973, , p. 90), and are designed to facilitate closeness to God (Koenig, McCullough & Larson 2001). In non-marketing studies, the effects of religious cues were found to be immediate and non-conscious. For example, Weisbuch-Remington et al. (2005) conducted two experiments by using positive and negative Christian religious cues beyond the conscious awareness of the respondents. The psychological and physiological responses were measured by tracking changes in cardiovascular patterns of respondents. The authors discovered that the symbols influenced both psychological and physiological states of the respondents under motivated performance situations. Extending these studies to marketing, it is probable that religious cues on packaging may have an influence on consumer perceptions of products. Indeed, religion being sacred and unalterable to its followers, religious cues may be even more powerful and influential than cultural or other symbols.

Finally, this thesis draws on the SIT (Blumer 1969; Mead 1934; Meltzer, Petras & Reynolds 1975) to support its contention that religious cues on product packaging may influence consumer choice. According to the theory, human beings are social creatures that interpret the world around them by giving it meanings derived from their environment (Burbank & Martins 2009). Hence, this theory has traditionally been applied to explain different aspects of sociology, such as how human beings express emotions in their social lives (Shott 1979) and the process through which people form social structures (Maines 1977). Leigh and Gabel (1992) extended the SIT to marketing and posited that the theory may explain consumer behaviour in that consumers associate symbolic meanings with products that they consume.

Traditionally, marketing theory treats consuming products as a response to some underlying need. The SIT, however, focuses on how products may serve as a priori stimuli to the consumption behaviour of individuals (Solomon 1983). Hence, consumers choose products depending on what the products represent to them and to others in their reference groups, rather than primarily on the product's functionalities and performance. The chosen product serves as a medium for consumers to portray themselves to others based on the symbolic meaning that society attaches to the product. Often, the symbolism is a manifestation of the consumers' self-image or self-identity. Leigh and Gabel (1992) used an example where blue jeans symbolise informality in society, and people buy and wear blue jeans in order to portray or communicate a casual stature. Solomon (1983) similarly drew upon the SIT to argue that consumers base their self-concept and behaviour via the subjective experience they derive from consuming products. Solomon surmised that consumers perceive social meanings in products and use these meanings to guide the roles that they wish play in society. Likewise, religion develops a worldview of its followers (El-Bassiouny 2014) and in line with the SIT, followers can develop their identity as believers of a religion (Walker, Smither, & DeBode 2012). On the other hand, the objects acquire symbolic meanings in society over time (Spears, Mowen & Chakraborty 1996) and the SIT posits that individuals learn these meanings by observing others' reactions to these objects and by considering the expected meanings of those objects.

Within this study's context, the SIT infers that Muslim consumers prefer products that symbolically reflect their religion. As explained earlier, to its followers,

Islam is a way of life in that the Islamic teachings embrace every aspect of a person's life, including what they can and cannot consume. Therefore, Muslim consumers may prefer products that symbolise their religion as a reflection of their self-identity, as well as to communicate their symbolic identity to others in society.

In short, as an integral part of religion (Geertz 1973), religious symbols can have immediate and automatic effects on human behaviour (Weisbuch-Remington et al. 2005). Yet, their role in motivating consumers has largely been ignored in marketing communications research and in particular, product packaging. Indeed, Leigh and Gabel (1992) propose that marketing communications can effectively serve as vehicles for the process of symbolic meaning transfer. Following from the above review, the following hypotheses are presented:

- H1: Muslim consumers choose products with religious symbols on product packaging over those without religious symbols.

- H2: Muslim consumers' rating of products with religious symbols on product packaging is higher than those without religious symbols.

Figure 5.1 depicts these two hypotheses.

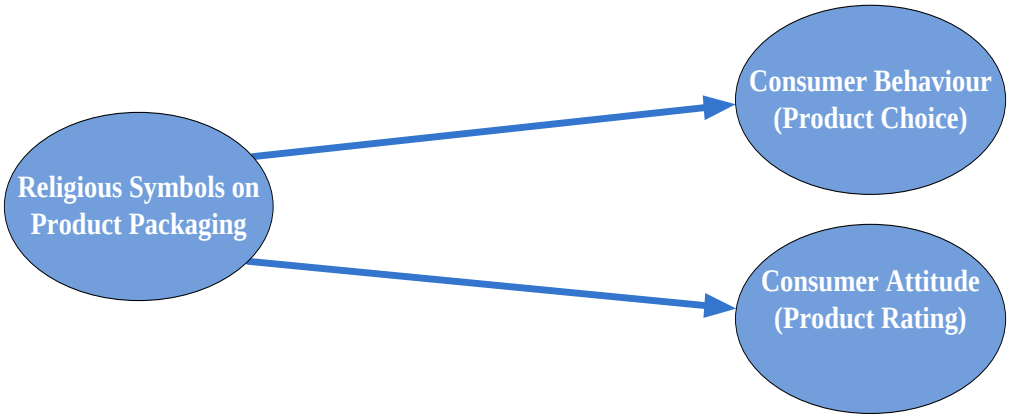


Figure 5.1 The influence of religious symbols on product packaging

5.2 The influence of symbol related legislations

Muslim world landscape

Researchers acknowledge the current demographic structure and growth potential of the Muslim population (Stephenson 2014). With about 1.6 billion followers worldwide in 2010, the religion makes up about a quarter of the total world population and with its current growth rate, it is likely to rise to 2.2 billion by 2030 (Pew Forum 2011). Also, the Muslim population in Europe is predicted to increase from six per cent to eight per cent (*Economist*, 2011), whereby 60 per cent of the current population already belongs to Asia (Stephenson 2014). Alluding to the potential of the population as a consumer force, Muslim consumers have been referred to as the 'third billion', with China and India taking the top two spots (Chen 2010; El-Bassiouny 2014). Therefore, Muslim consumers are known to be one of the fastest growing consumer groups (Stephenson 2014).

A distinguished characteristic of Muslims from followers of other religions is that they derive guidance from religion in their day-to-day matters, including purchases and consumption. In the Muslim world, 77 per cent of Malaysians and 94 per cent of Pakistanis say religion is very important in their lives (Pew Forum 2012). Hence, Islam plays a pivotal role in Muslims' lives as their followers follow, for example, certain dietary laws formulated by Islam and consume lawful (Halal) products. Along with following the main religious practices, Muslims have to consume Halal products. Muslims generally follow their religious teachings even in the western countires. For example, a study found that 84 per cent of Muslims in France always eat Halal meat (Bergeaud-Blackler & Bonne 2007). Similarly, in Belgium, Muslims were found to be influenced by religion and follow complex motivations to make purchase decisions as compared to their western counterparts (Bonne & Verbeke 2008). Researchers identify that religious motivations, respect for animal welfare and religious identity, go hand in hand with Halal meat consumption (Bergeaud-Blackler & Bonne 2007; Bonne & Verbeke 2006; Bonne et al. 2007). While in the quest for growth, some organisations are addressing the unique needs of Muslim consumers, as marketers have realised that this large-sized consumer group

has a huge potential, yet it still remains under-researched at the scholarly level and ignored by organisations. Researchers have recently termed this phenoma as 'margenalised', where this term means excluded or ignored (El-Bassiouny 2014, , p. 43).

Therefore, in order to expand business, organisations should not only understand the influences of religious teachings on Muslims across the globe, but they should also understand if there are any different cultural or legal implications in Muslim countires. This understanding will help organisations avoid marketing myopia. Despite the fact that all Muslims derive guidance mainly from the same religious sources, Holy Quran and Hadith (actions and teachings of the prophet Muhammad, peace be upon him), the cultural interpretations are specific to different countires (Wilson & Liu 2011).

Therefore, to understand Muslim consumer behaviour, it is necessary to study both the religious influences and their application in different cultures and countries. As in this study's context, religion provides an opportunity for marketers to develop marketing activities to serve the single bond of religion, particularly through the use of religious cues on product packaging. However, requirements regarding the use of some symbols may vary across countries. The literature review section (p. 111-113) for example, details why manufacturers and importers need to place the Halal symbol on product packaging in Malaysia and not in Pakistan**.**

Although, some frauds in the use of the Halal symbol have occurred on product packaging, (Rezai, Mohamed & Shamsudin 2012), this situation is beyond the scope of this study. However, some truthful Halal label legislations can help decrease such uncertainty. Nevertheless, the Halal process is not easily visible at the point of purchase, yet Muslim consumers generally pay attention to the Halal symbol and rely on the presence of symbol when making a purchase.

Visual attention to the label is an important way to get information and evaluate a product's label (LaBerge 1995; Pieters & Warlop 1999). The label attracts the attention of consumers as the information on the label helps consumers decide and choose from a variety of products and brands available on the shelf in a retail store (Mueller & Szolnoki 2010). Despite the wide variety of product packages and labels available in retail stores, it is still not clear how consumers process the information. However, consumers' attention has been researched in the advertising context, and according to Pieters and Wedel (2004), consumers' attention to print

advertisements is influenced by both bottom up factors (related to the stimulus itself) and top down factors (related to the viewer experience and motivations).

Therefore, bottom up attention is rapid and automatic depending upon the characteristics of stimulus (e.g. colour, size contrast from background). In this type of attention, consumers just encounter or come across the stimulus and are not particularly searching for it (Wolfe 1998). On the other hand, top down attention is intentional from a consumers' perspective, as they voluntarily search for a particular information or symbol on a product. For example, consumers may want to see the number of calories involved or search for a particular ingredient in a product. Much of the existing literature is on how consumers process different factors after they are attentive (Arcia et al. 2012; Imm, Lee & Lee 2012), but whether consumers use bottom up or top down approaches in comprehending the package of a product is not clear, so far.

The bottom up approach can be attributed as a typical attention approach to a product package where consumers are relatively less attentive, compared to advertising. However, in countries where there are specific laws regarding labelling on packages (e.g. Halal symbol in Malaysia for Muslims), consumers may use an up down approach, as they specifically search for that symbol. In contrast, in countries where there are no such laws and every product in a retail store is suitable for their consumption, consumers may use the bottom up approach. Therefore, this study postulates that Pakistani consumers use a bottom up approach, as no specific consumer motivations are involved. Hence, consumers in Malaysia will be more attentive to the symbols on product packaging, compared to their counterparts in Pakistan. Possibly, out of habit, the attentiveness to religious cues may even extend to non-food products that have no restrictions on religious grounds. Therefore, this study postulates that:

- H3: Compared to Muslim consumers from non-legislated countries, Muslim consumers from Halal legislated countries are more likely to choose products with symbols on their packaging.
- H4: Compared to Muslim consumers from non-legislated countries, Muslim consumers from Halal legislated countries rate products with symbols on their packaging higher.

Figure 5.2 depicts these two hypotheses.

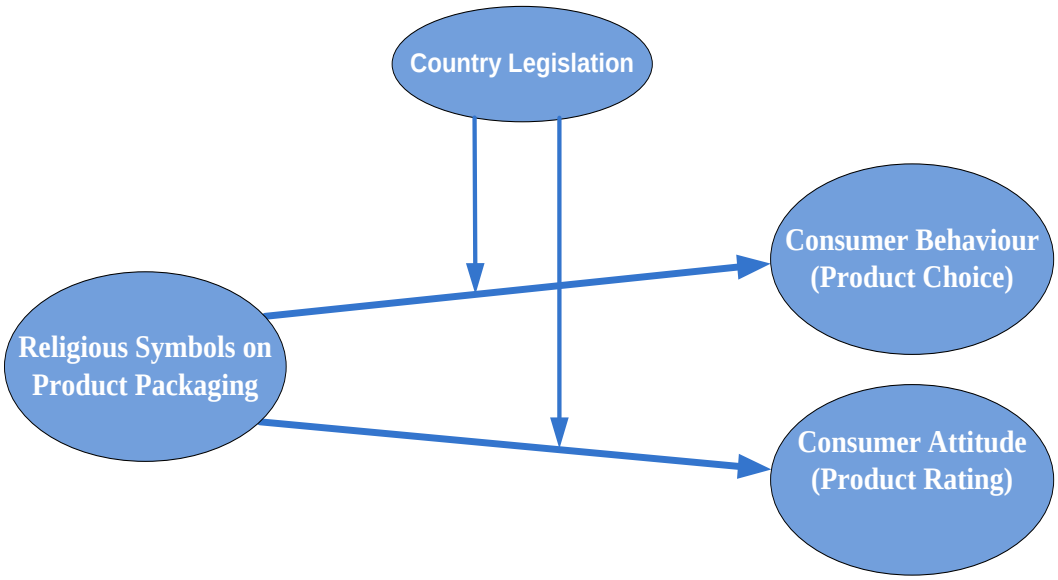


Figure 5.2 The influence of religious symbols as moderated by country legislation

5.3 The influence of language

Marketers strive to understand the effectiveness of choice of language in marketing communication. Advertisers can advertise a product in a country's local language or some standard foreign (English) language when communicating to bilingual consumers. Similarly, package designers have the choice to use either of the languages. For example, Coca-Cola in Malaysia can choose to use Malay or English to communicate via advertising or packaging to Muslim consumers. Therefore, an observation in the real market shows that the product package designers use local (national) language or English language (see literature review p.78-79 for examples and figures). However, it is not clear yet which is the better choice for ethnic consumers or Muslim consumers across the globe. In more diversified societies, the use of ethnic language has generated mixed responses. For example, recently (in 2014 at the Super Bowl), Coca-Cola's advertisement 'It's Beautiful' portrayed different kinds of people: Asians, cowboys Hispanics, Jews and Muslims, whereby 'America the Beautiful' was sung in different languages in a quest to implicitly show one identity as 'American'. After this advertisement aired on a Sunday night, people criticised the company on social media. Some of the people commented on Twitter

that it was ‘disrespectful’ to sing ‘America the Beautiful’ in any language other than English. (http://www.independent.co.uk/news/world/americas/a-racist-response-cocacolas-multicultural-super-bowl-ad-infuriates-twitter-users-9103853.html). Hence, it is necessary to understand whether the choice of language in marketing communication to Muslim consumers influences their attitudes and behaviour. In other words, it would be interesting to determine, for a bilingual Muslim consumer, whether the exact same words can have different associations depending on the language used on product packaging.

Prior research on the choice of language in marketing communications has considered advertising context, whereas product packaging has been ignored. Research on advertising language and its effectiveness can be categorised into three perspectives, detailed in the literature review section . First, researchers have measured the effectiveness of the use of language in terms of recall and recognition (e.g., Luna & Peracchio 1999, 2001; Shoham 1996). From a psychological perspective, this research stream mainly postulated that compared to a second language, the use of local language in advertising is more effective for bilingual consumers as it is easy to recognise and recall (Luna & Peracchio 1999, 2001).

In this regard, Luna and Peracchio (1999, 2001), advise to advertise in first language to bilingual consumers, not because it associates with their culture, but because the second language is difficult to process. Bilinguals find it hard to conceptually collect the information, which in turn causes them to not recall the entire message when presented in the second language. This makes sense in an advertising context, where difficulty in understanding a second language would have added to the difficulty in recognition and recall. Therefore, researchers (Luna & Peracchio 2001) found that the presence of a picture with the text increased recognition for the second language (see also Luna, Peracchio & DeJuan 2003). In this way, it can be attributed to the cognitive process by which consumers process information, and not the social or cultural factors. As discussed earlier, compared to advertising, packaging requires less cognitive effort. Therefore, there may not be much difference in the effectiveness of different languages on product packaging.

The second perspective considers the affective response of bilingual consumers to the use of language in advertising. This research stream mainly alludes to the importance of emotions and establishes that the use of local language can

evoke positive emotions in bilingual consumers (e.g., Puntoni, De Langhe & Van Osselaer 2009)). Luna and Peracchio (2005a) found that respondents perceived messages in local language advertising as more emotional compared to messages in the English language. The authors also argued that consumers could have more of an emotional attachment to some words in their local language than in the second language. Again, this is true from an advertising perspective, where the word choice is relatively greater compared to product packaging. The words used on product packaging are mainly informative; for example, brand name and price, and these cannot hold many emotional associations from a language perspective.

The third and more recent perspective is about different associations that local and/or foreign language can have in advertising. Again, this stream generally shows greater effectiveness of local language than second language. The research has shown different associations for local and foreign language. For example, local language is associated with closeness and belongingness, whereas foreign language (mostly English) is associated with sophistication and modernity (e.g., Gerritsen et al. 2007; Krishna & Ahluwalia 2008). Again, from a product package perspective, this study does not postulate different associations for different languages. As mentioned, product packaging contains objective information like brand name, price of the product or other product attributes.

While advertising can feature an idea, any event that may be nostalgic, evoke emotions or develop associations, packaging information does not generally perform these functions. Moreover, an in-depth review of the current literature reveals two main gaps. The first gap is that research to date lacks studies in a Muslim context as there is only one study Nickerson and Camiciottoli (2013) found in advertising context that tapped Muslim consumers' responses to the use of Arabic or English language in UAE (see literature review for more detail). This huge consumer group largely remains under-researched in this stream as well. The second gap states that the studies are conducted mainly in advertising and not in the packaging context. While packaging shape (e.g., Sevilla & Kahn 2014), the use of carbon labels (e.g., Vanclay et al. 2011), eco labels (e.g., Atkinson & Rosenthal 2014) and warning labels (e.g., Azagba & Sharaf 2013) are examined in packaging literature, only one study (Cyril DeRun & Sien Fah 2006) so far has researched the use of language in packaging. Packaging is different to advertising in terms of catching consumer attention and the cognitive process involved. Therefore, this study can provide some

interesting insights to package designers and marketers. Although studies in advertising indicate the differential effects of local languages and foreign languages, this study considers the different nature of packaging and argues counter to the earlier findings that there would be no difference in different languages when used on product packaging. Thus, the following hypotheses are presented:

- H5: For bilingual Muslim consumers, the influence on choice of local language on product package does not significantly differ from that of English language on product package.
- H6: For bilingual Muslims consumers, the rating of the product package in local language does not significantly differ from that of English language.

Figure 5.3 depicts these two hypotheses.

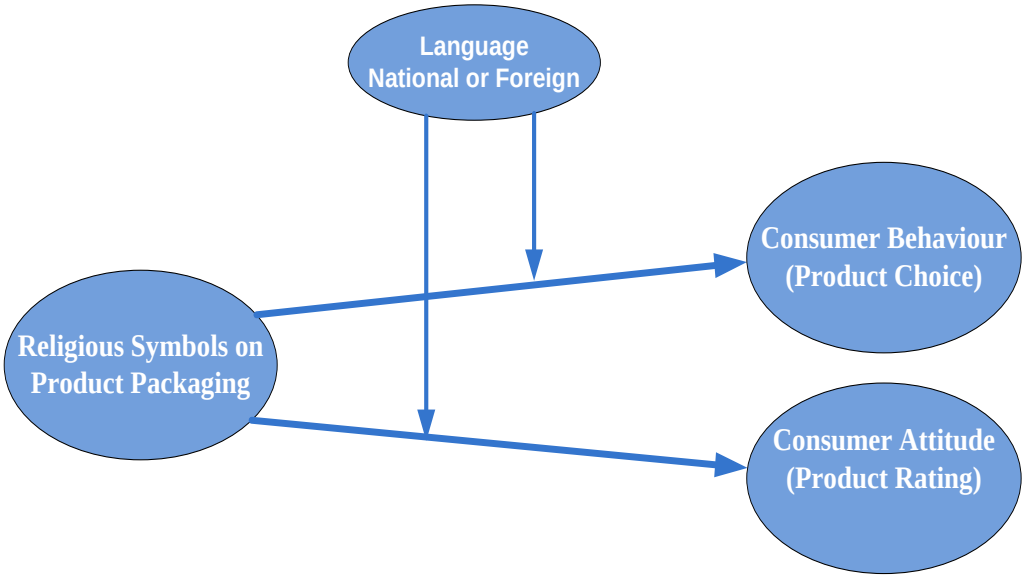


Figure 5.3 The influence of symbols as moderated by the language

5.4 Summarising chapter 5 thus far

The SIT, traditionally used to explain social aspects of human behaviour, is extended to understand Muslim consumer behaviour. Religion is very important to Muslims and influences their everyday lives, especially consumption, unlike other religions. Certain symbols are associated with religions and thus, are very important for followers of those religions. For example, a Cross is associated with Christianity and a Crescent is associated with Islam. Even though marketers and producers employ these religious symbols via marketing communications, the research in this area is scarce, especially with Muslim consumers. Yet, this study indicates the importance of discovering an untapped consumer group with huge potential and postulates the importance of religion and religious symbols for Muslim consumers. The presence of religious symbols on product packaging will not only influence consumer choice (behaviour), but also their attitude towards that package. Therefore, the first hypothesis regarding consumer choice is presented, that Muslim consumers will prefer a product with religious symbols present on its package compared to a product package without religious symbols. The second hypothesis is regarding consumer attitudes, whereby Muslim consumers will rate the product with religious symbols on its packaging higher than the product package without religious symbols.

While Muslims around the globe share a common bond of religion, different countries of the Muslim world have business laws to suit the demographic structure of their population. For example, Malaysia mandates producers to place the Halal symbol on a product's package to show it is suitable for Muslim consumption. However, this symbol is not mandatory in Pakistan, as by law, every product available in retail stores must be Halal and suitable for Muslim consumption, because majority of the population (96 per cent) is Muslim. Therefore, to further increase the generalisability of the influence of religious symbols on Muslim consumers and test the differential effects of different laws, this study postulates that religious symbols would have greater effects on consumer choice and attitudes with Muslim consumers from Halal-symbol legislated countries compared to those from non-legislated countries. Therefore, the third (consumer choice) and fourth (consumer attitude) hypotheses are formulated.

Finally, the study draws from literature and analyses the effects of language on product packaging on consumer choices and attitudes. Past research on the

influences of language is limited to advertising and covers only three main areas. The first area investigates the influence of language on consumer recognition and recall and establishes that bilingual consumers easily recognise and recall local languages in advertising compared to foreign languages. The second research stream shows the importance of local language in terms of evoking positive emotions as compared to foreign language, and the third stream is about bilingual consumers adopting different associations for local and foreign languages. Drawing on past literature, this study assumes different ways of processing advertisements and product packages. Therefore, the differential effects of local and foreign languages found in advertising will not hold for product packaging. This study hypothesises that these languages will perform similarly in terms of consumer behaviour and attitude towards product packaging.

Having established the core concepts and structure of the conceptual model, the following section takes into account the religiosity of consumers and different symbolic values of products. The influence of religious symbols on product packaging on consumer choice and attitude may vary according to the level of religiosity of consumers. Moreover, the influence of religiosity may differ across product categories, assuming that different products may have different symbolic values for consumers. Drawing on the literature review, this dissertation hypothesises that depending upon the degree and dimension of religiosity, consumers may show different behaviour and attitudes towards the presence of religious symbols on high or low symbolic value products.

5.5 Religiosity and product category interaction

Religiosity can be defined as one's belief in God and a commitment to act according to the principles believed to be set by God (McDaniel & Burnett 1990; Weaver & Agle 2002). Therefore, religiosity is a product of religious affiliation and religious commitment, where religious affiliation is about being a member of a religious group and religious commitment relates to how much one actually follows the religion's teachings. In this study's context, every Muslim is a member of Muslim community and thus, is affiliated to Islam and their level of religious commitment depends on how much they act according to the Islamic teachings. Although religion is more important to the majority of Muslims compared to followers of other religions, a

Muslim's degree of religious commitment varies within the Muslim community. Studies in the literature review also state that consumer behaviour may differ across religions due to the different levels of religiosity and/or religious commitments and that the behaviour may differ for consumers with the same religion. Since Culliton's (1949) study on the relationship between business and religiosity, research has established that religiosity can guide and even determine individual attitudes and behaviour across all walks of life, including business practices (Clark & Dawson 1996), moral reasoning (Glover 1997) and social wellbeing (La Barbera & Gurhan 1997). More recently, research has shown that religiosity influences human attitudes and behaviour (Vitell et al. 2009; Weaver & Agle 2002).

Despite the scarce research on religion and consumer behaviour, researchers recognise religiosity as an important aspect to study in consumer behaviour. Past researchers have used religiosity to explain and predict consumer behaviour. Indeed, researchers suggest a possible directional impact of religion measured by religiosity (e.g., Fam, Waller & Erdogan 2004). Previous research also suggests that highly religious consumers are generally more traditional, conservative, insightful and disciplined (McDaniel & Burnett 1990), whereas less religious consumers are more likely to be trendy and risk takers (Esso & Dibb 2004).

While research has established that religiosity may influence consumer behaviour, less is known about how this relationship may differ when it is studied in conjunction with other concepts, such as the use of religious symbols on product packaging. Moreover, the studies on religiosity and consumer behaviour have shown mixed findings; scholars term this relationship as a 'roller coaster' phenomenon (Spilka et al. 2003; Weaver & Agle 2002). Religiosity is not a one-dimensional construct. The relationship between religiosity and consumer behaviour is not straightforward and may differ depending upon the dimension of religiosity. Allport (1950) proposed two dimensions of religiosity, intrinsic versus extrinsic religiosity. Past studies suggest that depending on the dimensions of religiosity (intrinsic versus extrinsic), consumer behaviour outcomes may vary. For example, in a consumer ethical behaviour study, Vitell, Paolillo and Singh (2005) related consumer ethics to these two dimensions of religiosity. They discovered that intrinsic religiosity (related to personal and spiritual objectives, such as praying in private) significantly determined consumers' ethical beliefs. Further, this relationship held for both active (e.g. reporting a lost item as stolen in order to claim insurance compensation) and

passive (e.g. getting surplus change and pocketing it) behaviour. By contrast, extrinsic religiosity (related to exterior and social objectives, such as owning religious books) was not a significant determinant of both active and passive types of behaviour. Given that intrinsic religiosity is a commitment to religion (Allport, 1950; Vitell, Paolillo & Singh 2005), it is reasonable to assume that people high in intrinsic religiosity are more ethically inclined. By contrast, extrinsic religiousness is an external manifestation and 'a source of comfort and social support' (Vitell, Paolillo & Singh 2005, p. 177). Therefore, compared to intrinsically religious people, extrinsically religious people may not be as committed to a religion's principles, let alone acting according to the principles.

Alternatively, marketing researchers have long linked symbolism to consumer behaviour (Leigh & Gabel 1992; Mick 1986; Peracchio & Meyers-Levy 2005). An early study by Levy (1959) already endorsed the idea that products may provide symbolic value to consumers and consumers often choose the products not only for their functions, but also to gain the symbolic value beyond the functional use of the products. Mick (1986) envisaged the consumer world as a web of meanings among consumers and marketers woven set in cultural space and time. This definition elicits three major aspects in the consumer world. The first is that there are marketers who promote and/or advertise products. Second, the products are promoted by highlighting the symbolic meaning of the products to consumers and third, the products may mean different things to different consumers depending on their cultural background.

As mentioned, the SIT is used to understand psychological underpinnings for symbolism in consumption (Henley et al. 2009; Leigh & Gabel 1992). Again, contrary to the traditional marketing theory that focuses on the underlying needs and functional attributes of products, the SIT can explain the symbolic attributes and/or meanings that consumers attach to different products. From a religious perspective, this means that the products hold different symbolic values to different consumers. If so, consumers' choices and attitudes will depend on the symbolic value of products, along with their functional value and/or performance of the product. However, individuals with high religiosity will prefer products that hold high (positive) religious symbolic value compared to individuals with less religiosity.

While religious teachings and principles broadly guide consumers in choosing products, the selection may vary within a range of products according to the different

lifestyles and different symbolic identity's of individuals. For example, a well-known teaching is about the modesty of women's fashion. However, female consumers may perceive or derive different symbolic identity from the same dress. Therefore, while one dress may be acceptable to a female Muslim consumer, another may find the same dress indecent. Indeed, this point is raised by Mick (1986) and others (Leigh & Gabel 1992), who asserted that the same product may relay different symbolic meanings to different consumers.

Product categories and religiosity interaction has been reported in the literature and it was discovered behaviour can vary with various product categories. For example, Esso and Dibb (2004) investigated the influence of religion on shopping behaviour for a high involvement product purchase (television) and found no significant results. However, Dotson and Hyatt (2000) specifically studied the use of religious symbols for different product categories depending upon the involvement level. In advertisements for pet health insurance, the authors manipulated the presence or absence of the Christian Cross. Product category involvement and religiosity were found to be related to attitudes towards the advertisement, attitudes towards the brand, and purchase intention, albeit not as hypothesised. It was also discovered that low involvement respondents who were high in religiosity had a less favourable attitude towards the brand and had a lower purchase intention when they saw advertisements containing the Cross. High involvement subjects who were also highly religious showed more favourable responses towards the product when the Cross was present. The authors attributed the inconsistent results to inappropriate associations between the religious symbol and product category and suggested that respondents might have found this offensive. Moreover, the authors not only recommended religiosity as a viable construct to be included in consumer research, but also called for more research on religious symbols and product interaction. Consequently, the SIT would also mean, in this context, a greater response by the intrinsically religious individuals to the use of symbols on product packages that contain a high symbolic value. On the other hand, extrinsically religious people will show greater responses to the use of religious symbols on product packages of low symbolic values.

Therefore, the following hypotheses are posited:

- H7a: For high symbolic value products, intrinsic religiosity determines the rating of the product with a symbol more than extrinsic religiosity does.
- H7b: For low symbolic value products, extrinsic religiosity determines the rating of the product with symbol more than intrinsic religiosity does.

Figure 5.4 depicts these two hypotheses.

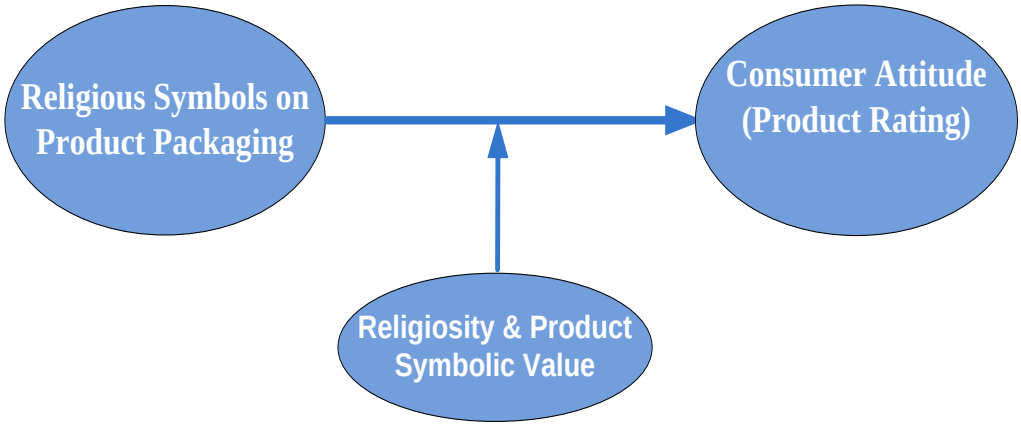


Figure 5.4 Religiosity and product category interaction

5.6 Summary of chapter 5

This chapter developed the dissertation's conceptual model, whereby the model applies the SIT to study Muslim consumer behaviour and attitudes towards the use of religious symbols on product packaging. As discussed, religion is very important in Muslims' lives and thus, so are religious symbols. Therefore, this thesis postulated a positive relationship between the use of religious symbols on product packaging and Muslim consumers' choices. Moreover, this study seeks to measure both consumer choices and consumer attitudes in order to better understand and predict consumer behaviour.

Despite the frequent use of religious symbols in marketing communications, the use of Islamic religious symbols' on product packaging and the effects on Muslim consumers is yet to be studied. A key contribution of this study, which this author believes no one has explored, is the influence of religious symbols on Muslim

consumers. Moreover, the study presents different hypotheses to test consumer choices and attitudes. As the method section will further discuss, this thesis uses advanced methods of choice modelling along the SEM to test the hypotheses presented.

Similarly, no study has previously investigated the difference in attention consumers pay to different product packages mostly due to government legislations. In order to further test and generalise the influence of religious symbols, this study postulated differential effects in different countries. Again, two hypotheses are presented to cater for behaviour and attitudes and are to be tested by using advance statistical techniques.

In addition, different effects of language are established in advertising. In advertising to bilingual consumers, the studies showed dissimilar effects of local language compared to foreign language in terms of recognition and recall (e.g., Luna & Peracchio 1999; Luna & Peracchio 2001), emotions (e.g., Puntoni, De Langhe & Van Osselaer 2009) and associations (e.g., Krishna & Ahluwalia 2008). Suggesting that there are different ways that consumers process advertising and packaging, this study is the first to hypothesise similar effects of local language and foreign language on product packaging. Again, two hypotheses are presented to be tested in two countries for more generalisability and robust statistical techniques.

Finally, the study postulated that individuals with varying levels of religiosity would perceive the use of religious symbols in various ways. Having support from literature on religiosity product category interaction, this thesis hypothesises a greater response from intrinsically religious people towards the presence of religious symbols on high symbolic value products. Conversely, extrinsically religious people, as hypothesised, will show a greater response to the presence of religious symbols on a product packages with low symbolic value. Figure 5.5 displays the complete conceptual model of religion, consumer behaviour and attitudes.

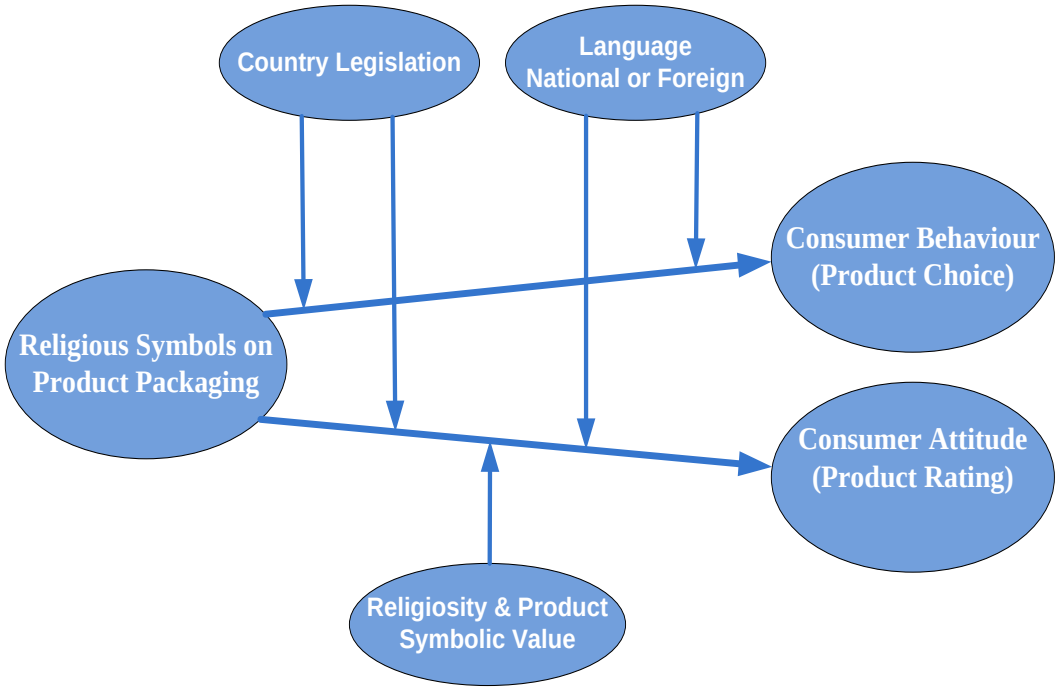


Figure 5.5 Complete conceptual model of the thesis

After developing the conceptual model and hypotheses, the next chapter describes the research methodology used in this thesis. Chapter 6 operationalises the model variables, outlines the data collection, describes the collected data and statistical tests and finally, reports the test results.

6. Research methodology

The thesis adopted an approach suited to address the research questions stated in chapter 1. The research process of this thesis began with a qualitative survey to elicit symbols and products of high and low symbolic value for Muslim consumers. The elicitation procedure followed a recommended method (Lee 2007; Lee & Murphy 2005). Next, expert interviews validated the results of this elicitation survey. Finally, four large scale studies via quasi experiments gathered data for empirical testing. Before going into the details of the research methodology, this chapter discusses attitudes and behaviour. This discussion highlights the importance of different methods for obtaining consumer responses. Therefore, data collection for this thesis involved both DCEs and Likert-type scales. After elaborating on consumer attitudes and behaviour and the use of multiple methods, this chapter outlines the suitability of research context. The elicitation survey and procedure are explained; the chapter then outlines data collection and analyses techniques. Finally, the data are first analysed for sample characteristics and examined test assumptions, including normality.

Marketing researchers strive to understand attitudes and behaviour of consumers and what drives consumer buying decisions. Better understanding of consumer behaviour and consumer decision-making processes helps firms to address consumer needs and attain a competitive advantage. To explore and understand what drives buying decisions and predicts consumer behaviour, marketing researchers use attitudinal measures (e.g., Hornikx, van Meurs & Hof 2013) or behavioural models (e.g., Mueller, Lockshin & Louviere 2010), where choice is used as a proxy of behaviour. Attitudinal and behavioural models are often used to get responses for different stimulus in marketing communications. Therefore, these models have the capacity to examine effectiveness of marketing communication. This chapter begins

by reviewing the concepts of attitude and behaviour and then moves to discuss different measures for these concepts.

6.1 Attitude

Although attitude is an old concept (Allport 1935), it still remains important and relevant in understanding individual psychology (Ajzen 2001; Bandyopadhyay & Martell 2007; Crano & Prislin 2006; Fishbein & Middlestadt 1995; McGuire 1968; Olson & Zanna 1993; Thurstone 1928). Despite its longstanding use in social psychology, researchers still debate what constitutes an attitude. In an early study, Allport (1935) reviewed more than hundred definitions of attitude developed since the mid-1800s and concluded that despite their varying forms, attitude is generally a learnt tendency to respond to an object in an enduring manner. The author defined attitude as:

> A mental and neural state of readiness, organized through experience, exerting a directive or dynamic influence upon the individual's response to all objects and situations with which is it related. (p. 810)

Since this early description of what makes and attitude, researchers have developed various explanations for this concept. For example, attitude is an established and affective response to an object (Rosenberg 1956). Attitude is an inclination towards an object or evaluation of an object with some degree of favour or disfavour (Eagly, Alice H. & Chaiken 1993) or, more generally, attitude is a summary evaluation of a psychological object (Ajzen 2001). Attitudes describe how people feel or think about objects, people and events around them. The concept also relates to the tendency of people to react to some events or situations.

Researchers differ in their consideration of attitudes as stable and enduring phenomena or a spontaneous reaction in a particular situation. Recently, Bohner and Dickel (2011) reviewed studies on attitudes and attitude change from 2005 to 2009 and reported that some scholars view attitudes as a stable evaluation of an object, stored in memory of human beings (e.g., Fazio 2007; Petty, Briñol & DeMarree 2007; Visser & Mirabile 2004), whereas other scholars view attitudes as spontaneous reactions to an object in a given situation (e.g., Conrey & Smith 2007; Gawronski & Bodenhausen 2007; Schwarz 2007). Bohner and Dickel (2011) depicted a continuum to categorise the definitions provided in a special issue of *Social Cognition* (2007, Vol. 25[5]), to the question of 'What's an Attitude?' (see Figure 6.1).

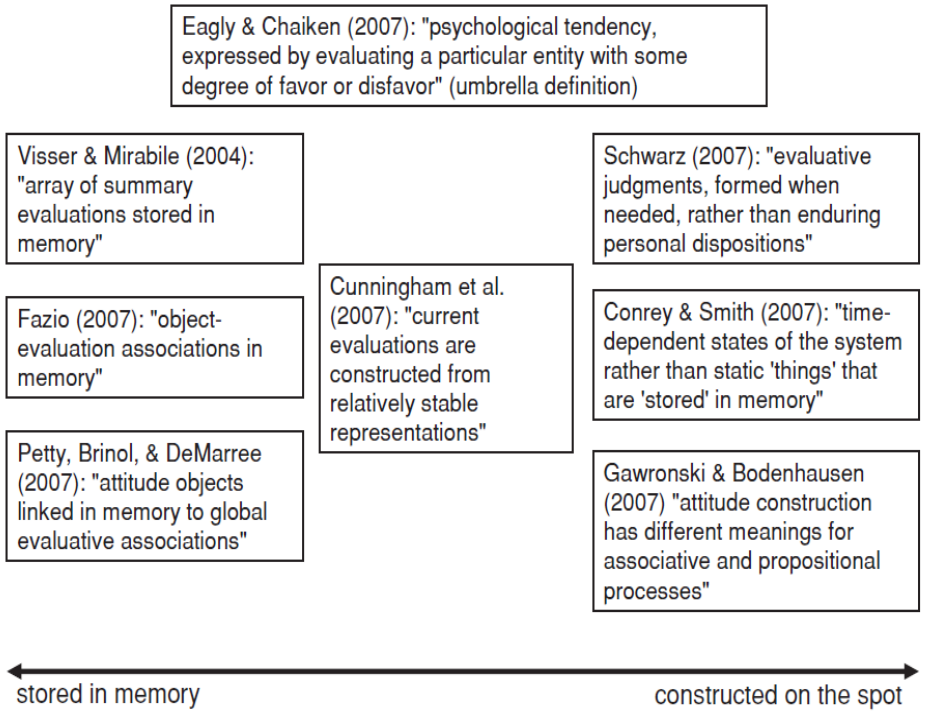


Figure 1

Attitude definitions, ordered according to their conceptualization of attitudes as stable entities (*left*) versus temporary constructions (*right*).

Figure 6.1 Attitude definitions (adopted from Bohner and Dickel, 2011, p. 393)

In summary, this continuum provides three different positions of researchers in this area. The left side of the continuum alludes to the stability and lasting tendency of attitudes. On the other hand, the right side of the continuum is more context sensitive. The authors in the middle take an intermediate position to consider attitudes as spontaneous responses, however, retrieved from memory. Empirical evidence supports all these premises of attitudes (Bohner & Dickel 2011; Schwarz 2007). These different views of attitudes can have different implications for understanding the structure of attitudes in different discipline. The next section discusses attitudes from marketing or consumer behaviour perspectives.

6.1.1 Attitudes in marketing

In marketing, the attitude concept resembles and borrows definitions from psychology. For instance, attitude is ‘an individual’s basic orientation for or against some object, be it a product, service or a retail outlet’ (Neal, Quester & Hawkins 2003, , p. 20) or buyers’ brand preference derived from their evaluative views about

the brand (Howard & Sheth 1969). Likewise, attitude is simply customers' comprehensive evaluations of a product (Bolton & Drew 1991). Therefore, in marketing and consumer behaviour, attitudes describe how people think about brands, products and marketing communication. For example, how people feel about a stimulus in advertising or, in this research context, how consumers will respond to the use of symbols on product packaging. The consumer may favour (positive evaluation/attitude) such use of symbols or disfavour (negative evaluation/attitude) it. In this way, despite different definitions used in marketing and consumer behaviour literature, a common characteristic of this psychological concept is its bipolarity. This bipolarity of favourable versus unfavourable tendencies of individuals is referred as a unique characteristic of attitudes (Allport, 1935).

Marketing researchers who are indeed interested in the behaviour of consumers examine attitudes on the premises that attitude forms and shapes behaviour. Therefore, much of the marketing research has debated the conceptualisation of attitude and how it does (or does not) lead to behaviour. Some theorists posit that attitudes lead to behaviour (Ajzen 1991). For example, a famous model to explain consumer behaviour, Theory of Planned Behaviour (Ajzen 1991) posits that consumers behave in the way they intend to behave and thus attitude can serve as a good predictor of behaviour. This theory assumes that behavioural intentions of individuals are determined by an individual's attitudes along with other factors relevant to that behaviour. Similarly, Sheeran's (2002) literature review concluded that attitudes have been widely used to predict and explain a wide range of behaviours, from weight loss to illicit drug use.

Therefore, it is not surprising that the use of attitudes has also been common in the evaluation effectiveness of marketing communications. Past research in this area shows that attitude towards advertising influences consumers' response towards advertising and thus, influences their purchasing behaviour (Mitchell & Olson 1981). Mehta (2000), for example, found that consumers who had more favourable attitudes towards advertising were more likely to recall the brand and were more influenced by advertising. Similarly, Nedungadi, Mitchell and Berger (1993) found that consumer attitudes towards advertising influence their motivation for searching for more information, and that this influence is prominent particularly in online advertising contexts. A literature review for this thesis also revealed that most of the studies measured attitudes of the respondents in order to understand the influences of

religion as well as examining the cues in marketing communication (see literature review in chapters 2 and 3).

6.1.2 Measuring attitudes

As discussed, most of the research in marketing, particularly in marketing communication, is conducted using attitudes. Attitudes relate to the thinking and feelings of the individuals and people are not often consciously aware about their thoughts about a particular object or a product. For example, if asked about a product, a respondent may not hold specific thoughts towards that product or its design. Researchers have encountered such issues and offered a number of techniques for measuring attitudes. The techniques include the Thurstone equivalent-intervals technique (Thurstone 1928), method of summated ratings developed by Likert (1932), Guttman's scale analysis (Suchman & Guttman 1947), Lazars-feld's latent-structure theory (for a discussion on this theory, Stouffer et al. 1950) and the semantic differential (for application see Mindak 1961). The detail and complexities involved in these techniques is beyond the scope of this thesis.

However, it is common in marketing to measure and examine attitudes by using these scales. Most often this is done by getting responses using the Likert scale, where responses are anchored on a continuum typically having two extreme points as ‘strongly agree’ and ‘strongly disagree’(or ‘very important’ and ‘not important at all’) with a varying number of scaling points from one to five or from one to seven. This is a forced choice method, where respondents must give some rating on the given scale. The data generated are analysed by different statistical techniques in order to learn the structure, correlations and effects of attitudes. Marketing researchers and practitioners widely use such attitudinal measures to examine people’s responses towards products and advertisements (Argyriou & Melewar 2011).

Indeed, researchers generally assume that knowing consumer attitudes towards marketing stimuli can help predict their actual purchase behaviour. Notwithstanding widespread marketers’ perceptions that understanding consumer attitudes helps them to design products and develop marketing strategies, research exists to question the link between attitude and behaviour. Therefore, the next section sheds light on the gap between attitude and behaviour to see if any other measure can be used for more accurate predictions of consumer behaviour.

6.1.3 Attitude behaviour gap

Attitudes are a good predictor of actual behaviour—a sceptical phenomenon as attitudes are often not turned into behaviours (Sheeran 2002). Researchers referred to this notion as 'attitude behaviour gap' or 'words deeds gap' (Carrigan & Attalla 2001; Papaoikonomou, Ryan & Ginieis 2011; Sheeran 2002). There is inconsistency reported between what consumers say to do and what they actually do while purchasing (Belk, Devinney & Eckhardt 2005; Shaw et al. 2007). Indeed the poor predictability of actual behaviour by attitudes can be traced back to the seminal writings of LaPiere in early 1930s. The author concluded, from the exploration of racial discrimination, that while attitudes could be measured quantitatively, these were poorly correlated with the actual behaviour (LaPiere 1934). Despite these early findings of weak correlation between attitude and behaviour, this research was generally ignored until the 1960s, when the validity of attitude measurement became more sceptical. Wicker (1969) looked at 47 studies in order to test the correlation between attitude and behaviour across a range of topics. The author found that overall, there was a low to weak correlation between attitudes measured and behavioural outcomes, as most were close to zero and a few were over 0.3 (Wicker 1969; Wright, M & Klÿn 1998). Therefore, the author postulated that evidence did not support translation of attitudes into behaviours and that there is a discrepancy between the verbal expression of individuals and their actions.

More recently, the studies to investigate ethical consumer behaviour (e.g., Fernández Kranz & Merino Castello 2005; Mohr, Webb & Harris 2001) suggest that consumers are more ethical in their attitudes and they will prefer to buy products from socially responsible firms. Contrary to what these studies suggest, the market share for these products remains less (Carrigan & Attalla 2001; Cowe & Williams 2000). Cowe and Williams (2000) discussed discrepancy as the 30:3 phenomenon, where 30 per cent of the consumers show positive attitudes and claim to buy ethical products, but in reality, only three per cent actually buy such products. Overall, current literature is not clear about the predictive ability of attitudes and researchers also question the direction of attitude-behaviour relationship (Winchester, Romaniuk & Bogomolova 2008). It is important for marketers to understand this attitude-behaviour gap and that the words of individuals should not be taken as granted. Hence, researchers should take into account not only the alternative methods to study

consumer behaviour, but they should also employ a mix method approach for more accurate and valid results.

6.2 Discrete choice experiments for measuring behaviour

An important objective of marketing research is to predict the actual purchase behaviour and see how consumers will respond to a product design or marketing communication. Consumer attitude theory generally considers consumers as logical and rational. They hold thoughts and feelings about products and are highly involved in purchases. On the other hand, economic theory of consumer behaviour holds that consumers derive utility from different attributes of a product instead of a product as a whole. Therefore, consumer preferences and choices can be examined by designing choice experiments that can manipulate product attributes. This method is different from the previously mentioned attitudinal methods. This method does not measure the rating or level of liking and favour or disfavour; rather, it asks the respondents to make a choice. Respondents are required to choose a product from a set of alternatives. Choice behaviour is then analysed to make inferences about consumer preferences, instead of analysing the attitudes.

DCEs are a well-established method for measuring consumers' preferences for the attributes of products and for estimating switching patterns for repeated choice (Louviere, Hensher & Swait 2000; Train 2009). DCEs typically model utilities conditional on a choice from a range of goods, such as a product category. Generally, consumer preference can be obtained from revealed preference (RP) data or SP data. RP data are considered better in consumer behaviour studies as they reveal actual purchases, but only if it is available. Moreover, it can help examine the current market situation or product attributes that are already present in the product. SP experiments are more suitable in determining consumer choice for products or product attributes that are not available in the market. Therefore, hypothetical choices like preference for a product package with religious symbols can be examined by SP experiments. An important objective of consumer behaviour research is to see what is preferred by consumers. Choice experiments can help accomplish the specific research objectives and determine the utility of products or product attributes that are still not available in the market. In a way, these can help in tailoring the marketing strategy to suit the product attributes to consumer needs.

Moreover, it can help in designing marketing communication or changing product packaging. A number of SP methods are used in research (e.g. conjoint experiments). Choice experiments are one type of SP method commonly used in transportation, psychology and consumer behaviour studies (Bastell & Louviere 1991; Hensher, 1994; Louviere, 1988a, 1988b). The strengths of choice experiments are that they can be used to determine values for goods or combinations of attributes that are not available in the market and that the attributes and levels of attributes can be adjusted to meet the researcher's objective (Adamowicz et al. 1998; Dhar & Simonson 2003). In choice experiments, respondents are required to choose between alternatives in a given choice set instead of ranking the options. Every alternative has some attributes and respondents select one that provides them best utility, making DCEs consistent with random utility theory (RUT) (Adamowicz et al. 1998). DCEs depict trade-offs respondents are willing to make between attributes and different attribute levels. These tell the researcher which attributes are important for the respondents and which are not that important.

This is the first study to consider symbols as a product package attribute and employ DCEs for investigating preference due to the presence of symbols on packaging. As mentioned, the weakness of the method is that it does not address the how and why of a particular choice. Therefore, this study also used attitudinal scale to overcome this shortcoming and better understand the consumer psychological underpinnings involved in the influence of a religious symbol.

6.3 Suitability of the context

This dissertation involved consumers in Malaysia and Pakistan. Pakistani respondents participated in identifying religious symbols and products of high and low religious symbolic value. Later, quasi-type experiments tapped responses from Malaysian and Pakistani consumers. The following arguments support using Malaysia and Pakistan for collecting data, as the two countries share common characteristics as well as the required diversification and differences within the scope of this thesis's context.

Malaysia and Pakistan are two Muslim majority countries. Malaysia is a multicultural country with a Malay, Chinese, Indian and indigenous population. Islam is the official religion in Malaysia. It is a Muslim majority country but with a

more diversified population, as 40 per cent of the population is non-Muslim, compared to four per cent in Pakistan (CIA 2010).

Like Malaysia, Islam is the official religion in Pakistan as 96 per cent of the population is Muslim (CIA 2010). Pakistan is a developing economy, with the world's seventh largest population (CIA, 2013). Both countries are Muslim majority and religious symbols are important in both of the countries. Similarly, although English is widely spoken and understood in these countries and they have bilingual populations, the national languages are different from English in both countries. Malay is the national language in Malaysia and taught in primary and secondary schools as a compulsory subject (David 2003). Along with a national language, Malay is commonly associated with the Muslims of Malaysia; it is their everyday language. Likewise, although English is widely employed for official communication, Urdu is national language in Pakistan and historically associated with the Muslims of the sub-continent. A large collection of Islamic religious literature is in Urdu. This language holds more translations of religious books than any other language in South Asia. Urdu is taught as a compulsory subject at primary and higher levels of education and widely understood throughout Pakistan. Therefore, marketing communication in these two countries is found in English as well as in their relative national languages: Malay in Malaysia and in Urdu in Pakistan (see literature review section for details).

The similar religious and lingual landscape in Malaysia and Pakistan suggests these countries as appropriate for tapping the behaviour of Muslim consumers. At the same time, different legislations for labelling and having religious symbols on product packaging in these two countries, arising from diversified population, will add to the generalisability of the research. As discussed previously, Malaysian food products are mandated to have the Halal symbol on food product packages to show that they are suitable for Muslim consumption. Conversely, in Pakistan, a predominantly Muslim country, law mandates that every product in retail stores should be suitable for Muslim consumption, irrespective of whether it has a Halal symbol on its package not. Moreover, not only as Muslim majority countries, these two countries are also emerging markets in Asia and are increasingly attracting the attention of academics and practitioners. Data are analysed for confounding influence demographics, however, factors or characteristics of the population that

can be problematic in this research context are unlikely (see data analyses section for detail).

Having attested to the context's suitability for this research, the next section outlines the triangulation by elaborating on the elicitation survey, followed by validation and experimental data collection.

6.4 An elicitation survey

As no previous studies have investigated the role of religious symbols on product packaging, the first task was to determine what symbols on product packaging might be effective in influencing consumer behaviour. As mentioned previously, many symbols can be associated with the religion Islam and the culture of Muslims. The primary objective of a free elicitation survey was to identify the symbols that are perceived as most representative of Islam. Similarly, another objective was to identify products of high religious symbolic value and low religious symbolic value. Elicitation surveys have been used by previous researchers to tap into the beliefs of people. This method involves asking the sample of the population about an object or behaviour (Lee 2007; Lee & Murphy 2005). Scholars have recognised the importance of elicitation surveys and suggested that instead of depending on intuition or previous knowledge, new concepts should be developed for new research contexts (Fishbein & Middlestadt 1995; Malhotra, Agarwal & Peterson 1996). This elicitation survey identified symbols as well as products of high and low symbolic value for Muslim consumers.

6.4.1 The elicitation procedure

The study undertook a free-format elicitation survey using students in a Pakistani university (n=97); Pakistan is a Muslim market where cultural symbols are of importance. Without prompting, respondents were asked to write down pictorial symbols that they most associate with Islam. They were also instructed to state products that they perceived as having high, as well as low, religious symbolic value. The participants were not given any credit or token for participation. Table 6.1 shows the 10 most frequently elicited symbols and products of high and low symbolic value. After identification of symbols and products, the next section elaborates on discussions held with Muslim scholars and practitioners of marketing.

Table 6.1 Results of elicitation survey

Rank	Symbols	Count	High Symbolic Value Products	Count	Low Symbolic Value Products	Count
1	Mosque	69	Dates	87	Alcoholic	79
2	Crescent	60	Honey	78	Tobacco	67
3	Green	54	Olives	69	Hair colour	46
4	Rosary	38	Milk	62	Indecent clothes	45
5	Sword	37	Pen	41	Cosmetics	45
6	Pictures of holy places	37	Rosary (Tasbih)	40	Alcoholic perfumes	39
7	Book/Holy Book	34	Scarf/ Hijab	39	Sexy videos/ /western videos	36
8	Scarf/Hijab	30	Perfume/ Ittar	37	Wine	33
9	Minaret	26	Water from Makkah/ Ab zamzam	37	Nail Polish	32
10	Tombs	26	Meat (camel, lamb)	33	Western (fast) food	31

6.4.2 Validation of elicitation survey

In order to validate the findings of the elicitation survey, in-depth discussions were conducted with Muslim scholars and practitioners of marketing. The marketing scholars (n=9) and practitioners (n=3) were approached in an informal way during a global conference on Islamic marketing.

First, an open-ended question was asked: for the participants to mention general symbols that were deemed as most representative of Islam. The symbols commonly suggested included verses from Holy Quran or Arabic words/sentences, mosque and mosque edifice, the Crescent, veil, Islamic dress, minaret, pictures of holy places, the colour green and Islamic architecture (in order of frequency). The participants also mentioned that dress and architecture may be more related to the culture and it would be different, for example, for Muslims in Middle East and Muslims in other countries.

In this way, the common symbols around the globe for all Muslims were verses from Holy Quran, mosque edifice, the Crescent and pictures of holy places like Holy Kaaba, (in Makkah). These symbols are sacred for all Muslims, irrespective of their different country of origin. The Holy Quran is the last book revealed by God (Allah) to His prophet, Muhammad (peace be upon him) and it is believed in and recited by every Muslim in the world. Therefore, any verse from it is sacred to all Muslims and symbolises Islam as well. A mosque is a place for praying for Muslims, therefore, mosque edifice is sacred and unique to all the Muslims around the globe. The Crescent is a sign of Ramadan (month of fasting) and the months of the Islamic calendar that start with the sight of moon (Crescent). This has long been used on the flags of Muslim countries and is a symbol of Islam in the world. At present, some countries like Malaysia and Pakistan have the Crescent on their national flags. Finally, Holy Kaaba is in Makkah (Saudi Arabia) and Muslims visit it for pilgrimage. Undoubtedly, it is also holy and sacred for all the Muslims in the world.

Afterwards, when the participants were specifically asked about employing a symbol on product packaging, there were mixed responses. Some said, 'well, it depends. The most appropriate symbol/logo would be the word "Halal" for food products'. The next question was 'what about other symbols and non-food products?' Most of the respondents were in favour of the Crescent. It was apparent from the discussion that the use of verse from Holy Quran and picture of Kaaba is deemed inappropriate to be used for advertising a product as they would be culturally sensitive and may even backfire. Most times, this conversation ended in discussion about thoughts on the commercial use of religious cues and questions like 'what do a religious cues on product packs mean to consumers'. Either this would be interpreted as a specific process followed to produce the products, or that Muslims own and operate the company.

These brainstorming discussions also included the identification and validation of products that have high symbolic religious value or low symbolic religious value for Muslim consumers. Most of the respondents mentioned honey, olives (and olive oil), dates, barley and milk as the products with high symbolic value. Keeping in view that most times they mentioned only the food products, they were specifically asked about non-food products. Then, the products mentioned were perfume (perfumed oil), Islamic banking products (services), *abaya* (Muslim female

dress) and pens. Similarly, the products with low to negative religious value included alcoholic products, cigarettes (smoking products), indecent clothes, western (fast food) products like burgers and pizza, cosmetics, especially hair colour and nail polish. Overall, the natural products (including fruits and vegetables) were considered of high symbolic religious value. Past studies also suggest religious people adhere more to natural foods then their non-religious counter parts (e.g., Onyango, Hallman & Bellows 2007).

Further, some participants considered utilitarian products as possessing more symbolic religious value and hedonic products as of less symbolic religious value. One of the scholars mentioned:

> The symbolic religious value can be according to the functional value of that product. If the product has more functional value, it is ultimately of high symbolic religious value and vice versa.

Similarly, the purpose and consumption of the product can also relate to the symbolic value of the product. If the product is purchased in appropriate quantities and consumed in a decent manner, it would have high symbolic value. The same product would be of negative value if bought and consumed in improper ways. This can be related to the famous Islamic teachings of spending a balanced life and not to be extravagant. However, this discussion is beyond the scope of this study. Overall, the discussion supports the results shown in Table 6.1.

In summary, the elicitation identified ten religious symbols. Moreover, it identified 10 products, each holding high and low symbolic value for Muslim consumers. The discussions concurred with the appropriateness of the elicited symbol and products. The discussion with marketing scholars not only validated the results of elicitation survey but also provided some interesting insights into Muslim consumer psychology and the use of religious symbols on product packaging.

Symbols: The elicitation survey resulted in the 10 top representative symbols of Islam. As mentioned previously, the objective to identify these symbols is to employ the most revered on the product package in order to examine the transfer of meaning and its influence on the purchase intentions of the consumers. The mosque is the most representative symbol of Islam, as elicited by 69 respondents. This symbol is too explicitly linked to Islam and may raise concerns with potential response bias. In addition, its use on the product package does not seem to be harmonious with commercial use of the symbol and relevant to marketing

communications. Consequently, the second most elicited symbol (the Crescent) was selected for this study's experiments.

High symbolic value products: The table shows the top three high symbolic value products are dates (87), honey (78) and olives (69). These products are natural produce and their top positions in the elicitation survey are also consistent with past studies, which show that religious people prefer natural products more than non-religious people do (e.g., Onyango, Hallman & Bellows 2007). However, these products are available in generic form and are rarely found in packaged forms at majority of the retail stores in the countries of interest. Consequently, this study used milk (62) and a pen (41) as products of high religious symbolic value for this study.

Low symbolic value products: The top two products of low symbolic value, alcoholic products (79) and tobacco products (67), are prohibited in Islamic teachings. While this study used the third top product, hair colour (46), in its pre-test, it turned out that the use of this product is skewed towards female gender in this thesis research context. Further, generally there is not a trend for students (due to their young age) to use hair colour; this is often used by different age group. Therefore, this product was dropped from remaining studies. Similarly, indecent clothes (45) are not packaged products and the use of cosmetics (45) is skewed towards the female gender. Finally, the study did not use alcoholic perfumes (39) because of nature of the product and the use of alcohol in it. Therefore, this study uses western DVDs (36) as representative of the low symbolic value products.

6.5 Measurement of constructs

As mentioned, the elicitation survey and its validation questionnaire were tested and validated in a pre-test. Finally, in order to address the research objectives, four studies were conducted in Malaysia and Pakistan. Table 6.2 provides a summary of the research methodology.

Table 6.2 Summary of Research Methodology

Study	Sample	Method	Goal	Results
Pre-test	Pakistani students, n= 300	Questionnaires similar to those used for later studies were distributed to the respondents to tap their choices and attitudes	To pre-test the questionnaire and check reliability of constructs	No major problems with the questionnaire, except for a few mistakes in instructions
Study 1	Malaysian students, n= 100	Respondents were asked to select one from choice set of two and then to rate the product package for different product categories	Impact of the presence of symbol on consumer choice and attitudes	The presence of symbol positively influenced choice and attitudes towards the presence of a symbol
Study 2	Pakistani students, n= 245	Respondents were asked to select one from choice set of two and then to rate the product package for different product categories	Impact of the presence of symbol on consumer choice and attitudes	The presence of the symbol positively influenced choice but no significant difference in attitudes towards the presence or absence of a symbol
Study 3	Malaysian students, n= 200 Pakistani students, n = 480	Respondents were randomly assigned to a manipulation in Malay or in English language in Malaysia and in Urdu or in English in Pakistan	Impact of verbal cues on respondents' choices and attitudes	Overall, the influence of verbal cues do not significantly differ from the use of a foreign language on consumer responses
Study 4	Pakistani consumers, n= 250	Respondents rated the products of high and low symbolic value with a symbol on the product package. Then a number of items tapped their intrinsic and extrinsic religiosity level	Impact of interaction, religiosity and product symbolic value	Intrinsic religiosity determines positive attitude more towards the use of symbol on high symbolic value products, whereas extrinsic religiosity determines a more positive attitude towards such use on low symbolic value products

In short, after the elicitation survey and pre-testing the questionnaire, ***Study 1*** was conducted to test the use of symbols on product package and the effects on Muslim consumers' choice and attitude towards the product package, with and without symbol. The context of this study is Malaysia and symbol is featured on the packaging of high symbolic value products as elicited in the elicitation survey. The choice (behaviour) is measured by using a 'select one' binary scale option, whereas attitude was measured on a Likert-type seven-point scale, anchored as -3 as the lowest rating and 3 as highest rating (later coded as 1 to 7). After checking sample characteristics (the behavioural data), the product packaging is analysed by choice modelling technique. The attitudinal data (the rating of the product) is analysed by comparing the means of ratings of two product packages. Finally, the results are presented. Considering the different legislation in Malaysia, and to increase the generalisability of the findings of the first study, the use of symbol is also examined in another country: Pakistan, in study 2.

Study 2 uses same procedure, settings and data analyses techniques as the Pakistan study. The behavioural response in this study is consistent and confirmed the findings of study 1. However, the use of a symbol does not significantly influence the attitude of this sample. This can be attributed to the relatively less attention by Pakistani consumers as there is difference in legislation. Therefore, in order to further examine influence of such different legislation, the findings for the Malaysian sample are compared to findings of the Pakistani sample. The findings confirmed the effects of legislation.

As the symbol influences the choice of respondents in both countries, it is useful to examine the use of verbal cues. The use and importance of national language along with English in these two countries is elaborated in the literature review and conceptual development. Against a backdrop of mixed findings in the literature, ***study 3*** examines the influence of the use of language on product packaging on consumer choice and attitude towards such use. Again, using the same experimental settings and procedure, the respondents in Malaysia viewed product packages in either Malay or English. On the other hand, respondents in Pakistan viewed product packages in either Urdu or English. The behavioural data are analysed by choice modelling and attitudinal data are analysed by comparing mean scores for rating.

It is discussed in literature review that not only religious affiliation but religiosity also influences consumer behaviour. As discussed, religiosity is regarded as one's belief in a God and a commitment to act according the principles believed to be set by the God (McDaniel & Burnett 1990; Weaver & Agle 2002). The influence of religious symbols and language in product packaging is examined for products of high symbolic value only in earlier studies. Therefore, ***study 4*** takes into account the influence of religiosity on consumers' ratings for product packages of high symbolic value products as well as low symbolic value products. In this thesis, consumers' religiosity was measured using the 11-item intrinsic/Extrinsic scale adapted from Allport and Ross' (1967) Religious Orientation Scale. Items were scored using a seven-point rating scale, from 1 = strongly disagree to 7 = strongly agree. Intrinsic religiosity consisted of five items representing respondents' personal or inherent religious objectives, such as living by their religion. Similarly, the six-item extrinsic religiosity was respondents' outward display of religious behaviour, such as attending religious gatherings to socialise and meet friends. This study involved a consumer sample from Pakistan and religiosity is measured by two dimensions: intrinsic religiosity and extrinsic religiosity. In this thesis, data are analysed by SEM and results are presented in next chapter (7).

6.6 Data collection and experimental attributes

As mentioned, this thesis collected both behavioural and attitudinal responses. For the behavioural measure, respondents selected one product package in a set of two alternatives. The choice was simple and did not require much thinking to match the real task, as consumers choose from a retail store that involves relatively less cognitive thinking at the point of purchase. Product packages were identical, except the presence of symbol was manipulated with two price levels. Thus, for one product, there are two choice sets and each choice set has two alternatives making this an orthogonal, complete block design. For the attitudinal measure, respondents rated the product packages using seven-point Likert scales, anchored as the highest on one end or lowest on the other end. This dissertation adapted the scale from relevant studies and used confirmatory factor analyses to measure the constructs. General demographics of the respondents covered their gender and age at the time of response.

The quasi-experiment instrument was a structured questionnaire, where respondents reported their choice from two product packages. The experiment design involved two products (milk and a pen, or milk versus a film DVD in study 4) x price level (high and low) x two religious symbols (with and without a symbol). Hence, the different combinations of prices and symbol presence/absence yielded four different product packaging designs for each product. The products and selected symbols are relevant and important to the target market as explained earlier. It is pertinent to mention that to minimise potential bias in the product selection process, the selected products are not problematic or controversial for Muslim consumers, such as wine or meat products. In addition, brand names and logos were omitted so that the respondents were not distracted by elements that were not a part of this study. Next, attribute selection is briefly discussed from a choice perspective.

Attribute selection

The literature review, briefly discussed in section 6.4, elaborated on the advantage of SP over RP; the researcher has control over the selection and manipulation of attributes of interest. However, attributes match the research objectives and research context. Therefore, attributes were carefully selected and manipulated in line with the context of this thesis as follows.

Products

The identification of high and low symbolic value products is elaborated on in the elicitation survey. This dissertation selected two products (milk and a pen) of high symbolic value (for three studies) and one product of high symbolic value (milk) and one product of low symbolic value (film DVD) for the fourth study.

Symbol

Similarly, as explained earlier, the elicitation survey identified symbols that are most representative of the religion Islam. From those symbols, the Crescent was selected to be employed with different product packages. The presence of the Crescent was manipulated for this study. It was either present or absent on otherwise identical product packages.

Price levels

The price of a product influences consumer choice and attitude towards that product. Choice experiments have the capacity to determine willingness to pay for a particular attribute and price elasticity. There were two price levels used in this study: high and low. The actual shelf price for the products was determined in the retail stores (in Malaysia and Pakistan) and it was increased by 10 per cent to set the high price. Special care was given to the use of decimals and whole figures in the design to allow for appropriate comparisons.

Design

Studies have shown that pictures or photographs may convey equal visual information compared to actual products, and are cost effective and easy to execute for research (Jaeger, Hedderley & MacFie, 2001). With each product, participants were shown pictures of the four product packages, a pair at a time, thereby resulting in four pairing scenarios. With each pair, respondents first selected their preferred product packaging and then rated the selected product package on a seven-point Likert-type scale. The package design and questionnaire were identical for all four studies, with only a difference of language where it was a measure of interest. Finally, they stated their level of religiosity. In addition to the psychological measures of religiosity, respondents indicated their gender and age.

Since the experiment involved face-to-face interaction, a structured paper and pencil questionnaire helped reduce interviewer bias and improve respondent co-operation (Malhotra et al. 2004). The participation was voluntary. Similar instructions were given to the respondents in all four studies and no study involved any token money or other incentive. As people tend to answer earlier questions more easily and accurately than later ones (Sudman, Bradburn & Schwarz 1996), the behavioural measures to determine choice and attitude were included in the first phase, whereas questions regarding demographics appeared at the end. To reduce unintended scaling effects (Sudman, Bradburn & Schwarz 1996), all responses used the same binary scale for choice and a seven-point Likert scale anchored as highest rate or lowest rate.

6.6.1 Pre-testing the questionnaire

A pre-test preceded the final data collection. Pre-testing should be extensive and contain all aspects of the questionnaire in its intended form (Malhotra et al. 2004; Martin & Polivka 1995). Moreover, respondents in the pre-test should come from a similar population as the final survey. As such, a pre-test took place in Pakistan in 2012.

The pre-test involved 300 students at a Pakistani university, resulting in 294 useable responses. There were 128 (44 per cent) males and 166 (56 per cent) females, ranging in age from 16 to 29 years and with a median age of 21; the mean age was also 21 years. The loadings for religiosity items were adequate and of acceptable reliability. The pre-test identified a problem with the instructions of the questionnaire, where respondents took more time to understand the choice scale and rating scale. The intended time for the response was shorter, as the response to packaging in the real retail stores in somewhat immediate and does not require a great deal of thinking. Therefore, the final questionnaire rephrased instructions to make it better and make the task more realistic. After refining the questionnaire, the subsequent studies took place later in Malaysia and Pakistan.

6.6.2 Data collection procedures

Three of the four studies involved students from Malaysia and Pakistan. The fourth study was conducted with a convenience consumer sample in Pakistan. The researcher was introduced to the faculty in a university in Malaysia and a university in Pakistan. After checking the timetables and negotiating times with the relevant lecturers, the researcher approached the respondents in their lecture halls. The experiment began with introducing the instrument as academic research and assuring respondents of their confidentiality. Next, the researcher distributed the questionnaire to the respondents. The questionnaire included the consent sheet for respondents. The consent sheet included information regarding research and approval from relevant ethics committees. Participation in the study was voluntary. The consent sheet was for reading and information only and did not contain a signature to ensure anonymous responses. Finally, the researcher collected the completed questionnaires and thanked the respondents before approaching the next prospective respondents. Respondents did not receive rewards for participation.

Having described the elicitation survey, main experiment design and data collection, the next section concludes this chapter by assessing the data's psychometric properties and demonstrating assumptions tested, acceptable levels of sample size, reliability, convergent validity and discriminant validity.

6.7 Data analyses

This dissertation used choice modelling and SEM with the maximum likelihood method to test different hypotheses. The software programs used were Statistical Package for Social Sciences (SPSS now called as PASW) version 20, NLogit (also called as Limdep) version 9.0 and AMOS version 20 (www.spss.com/amos). Multinomial Logit modelling was used for choice modelling and Maximum likelihood estimation was used for model specification. Maximum likelihood, the most common estimation method, is known for producing valid results (Hair et al. 2006) . Besides choice modelling and structural equation modelling, other data analyses and tests such as confirmatory factor analysis and *t*-tests used SPSS version 20 software (www.spss.com). Rather than averaging item scores, confirmatory factor analyses of underlying items yielded a construct's factor score. Prior to fitting the models to examine the hypotheses, tests analysed the constructs in the sample and psychometric characteristics of the items. The following sections report on testing assumptions and other test findings. While the age and gender differences are mentioned later in this chapter, the characteristics and demographics of every sample are presented with every study.

6.7.1 Choice analysis: Estimating the choice model

The DCE approach underlines that products have characteristics or attributes and individuals value different levels of these attributes. Therefore, DCE technique involves choice sets consisting of different attributes and levels presented to the individual consumers. In SP, the individual consumers choose their preferred alternative that provides maximum utility. The choice of the individual consumer is then modelled to analyse which attributes are important to the consumers. The utility derived is based on the alternatives present in the choice sets. The theoretical framework can be explained by RUT.

RUT (McFadden, D. 1978, 1980, 1986) drives analyses of DCEs that disaggregate the individual decision in which one product/alternative is selected from a given choice set. A given choice set is composed of alternatives. It specifies that the choice is a function of the actual and perceived product attributes in a defined choice set. It resembles the real life situation where a consumer is standing in a retail store and evaluates different attributes of the products available on the shelf. It takes into account the trade-offs between attributes within the decision process of an individual. Conceptually, consumers follow an underlying choice process (see Figure 6.2) to choose a product.

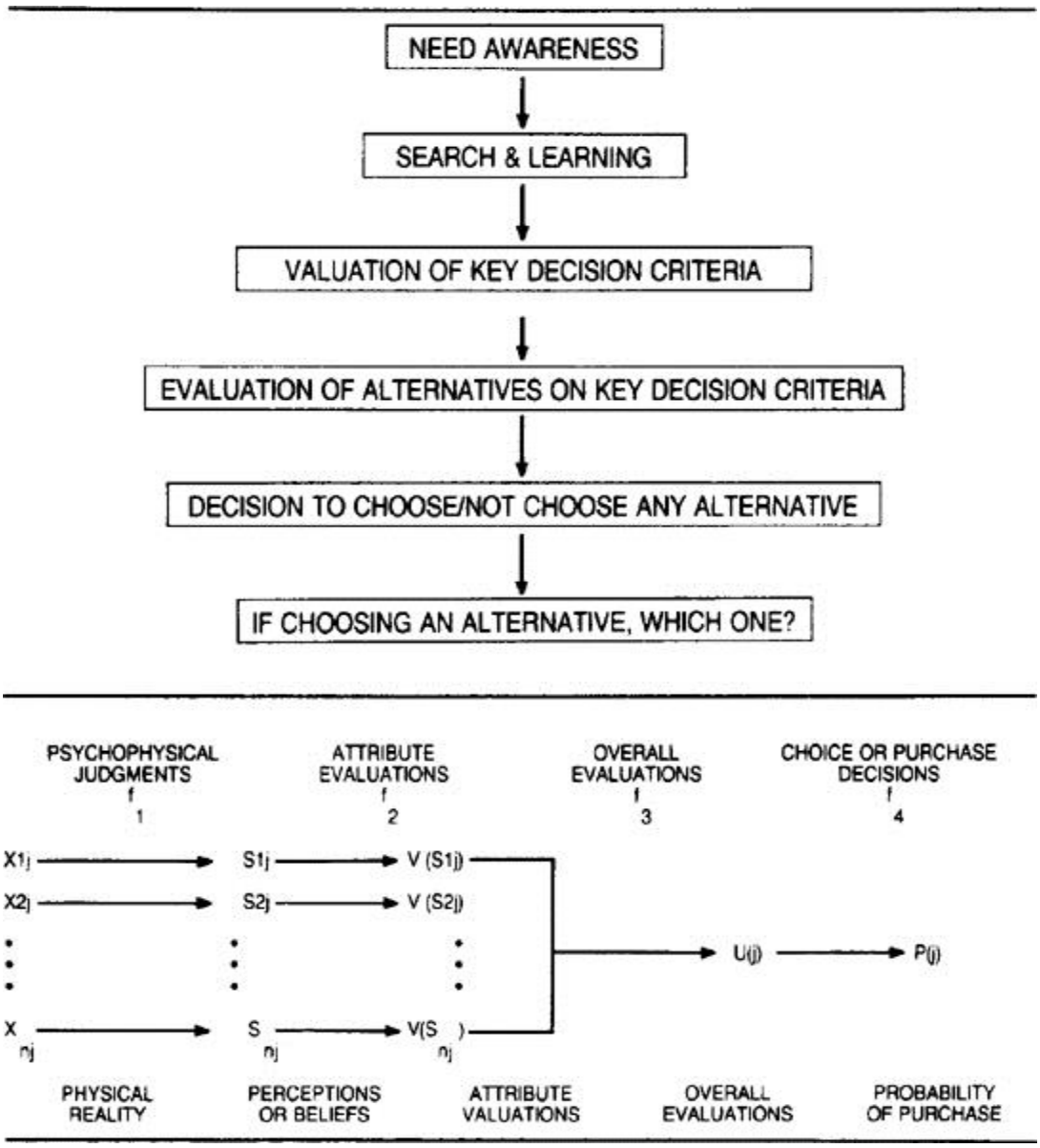


Figure 6.2 Consumer decision making (Louviere,1988a, , p. 10)

This process assumes a utility maximisation approach at the consumer's end. Researchers cannot explicitly observe the utility or the mental process involved in choosing an alternative. However, discrete choice data record the choice made by respondents (SP in this study) and the attributes of all the alternatives in a given choice set. This helps in investigating the choice, in light of attributes of the selection. One different aspect of this unique method from attitudinal measures is its capacity to consider the 'random' and 'as if' choice processes. The results indicate how often and in what proportions decisions are made, leading to the better predictive validity of the preference of a particular attribute. Similarly, latent utility suggests that the choice is dependent on the available options. Therefore, the utility can be explained by the following equation:

$$U_{\text{in}} = V\left(X_{in}, \beta\right) + \varepsilon_{in}$$

According to this equation, the utility of an alternative *i* in a choice set *Cn,* selected by an individual (*n*) consists of two parts. The first part is V (X in, β). It is related to the function of attributes and alternatives and is an explainable or systematic component.

The second part (ε_{in}) is an unobservable attribute and is an unexplained or random component. This is an error term that may exist because of the different preferences and errors in measurement.

The important assumption for analysing DCEs is that the individual (*n*) *will choose alternative (*i*) from all alternatives (*j*) in a given choice set (Cn), considering that *i* provides the maximum utility. This phenomenon can be denoted as:

$$y_{in} = f(U_{in}) = \begin{cases} 1 if U_{in} = \max\{U_{ij}\} \\ 0 \text{ otherwise} \end{cases} \forall j \neq i \in C_n$$

In this equation, yin is the choice indicator equal to 1 if alternative I is selected and it is equal to zero for otherwise. An individual chooses an alternative when:

$$(V_{in} + \varepsilon_{in}) > (V_{jn} + \varepsilon_{jn}) \forall j \neq i \in C_n$$

or

$$(V_{in} - V_{jn}) > (\varepsilon_{jn} - \varepsilon_{in})$$

However, the second part of this expression the term ($\varepsilon_{jn} - \varepsilon_{in}$) cannot be estimated, therefore, it cannot be exactly told that first part of the expression ($V_{in} - V_{jn}$) is actually more than second part ($\varepsilon_{jn} - \varepsilon_{in}$). What researchers can only tell is the probably of occurrence that the individual (n) will choose alternative i.

The distribution of ($\varepsilon_{jn} - \varepsilon_{in}$) is very important for interpretation of results (Train, 2003). For instance, this distribution can include the effect of unobserved factors that induce the individuals to choose alternative i.

McFadden (1974) shows that the probability of an individual (n) to choose alternative i is equal to the probability that the difference between the random (unexplained) component of any other alternative (j) and the chosen alternative (i) is less than the difference between explained utility levels of alternatives i and j for all J alternatives in the choice set (C_n). This can be expressed as:

$$\begin{aligned} P_{in} &= \Pr(y_{in} = 1 / X_{in}, \beta) \\ &= \Pr(U_{in} > U_{jn}) \forall j \neq i \in C_n \\ &= \Pr(V_{in} + \varepsilon_{in} > V_{jn} + \varepsilon_{jn}) \forall j \neq i \in C_n \\ &= \Pr(\varepsilon_{jn} - \varepsilon_{jn} < V_{in} - V_{jn}) \forall j \neq i \in C_n \end{aligned}$$

While researchers still cannot estimate the actual distribution of $\varepsilon_{jn} - \varepsilon_{in}$ across the population, it can be assumed that the term $\varepsilon_{jn} - \varepsilon_{in}$ relates to the choice of probability according to some density function $f(\varepsilon_{in})$.

Considering these assumptions and the simplicity of the design, the study uses multinomial logit (MNL) model to estimate and interpret the DCE data.

Multinomial logit model

While a number of options are available to model choice data, appropriate use depends on the nature and characteristics of data. The important aspect is to take into account that the random part of the utility (ε) is independently and identically distributed (IID). IID means that ε for every alternative, although unique in value, is not correlated with the value of other alternatives and distributed in exact same way. Theoretically, researchers could assign any distribution for ε, which results in different types of discrete choice modelling. Literature provides insight into different types of models including logit, general extreme values, probit and mixed logit (e.g., Train 2003).

The commonly used modelling approach MLN provides most restrictive assumption of IID. Moreover, it is widely used and accepted as it offers a convenient form of choice probabilities because of its closed form and easy interpretation (Train 2003). Therefore, this approach is referred to as a 'workhorse' for discrete choice analyses (Hensher, David A., Rose & Greene. 2005). An important assumption of the logit model based on IID is the property known as independence from irrelevant alternatives (IIA) (Long 1997; McFadden, D. 1978). The implication is that ratio of the choice probabilities of any two alternatives stem from the perceived utility of their attribute levels and is unaffected by the systematic utility of other alternatives (Long 1997). The DCEs used in this thesis are simple and the MNL model offers the optimal estimation.

After deciding the choice modelling approach, the next important decision is the estimations method. Like different choice models, a number of estimation methods are available. This thesis uses the commonly employed Maximum Likelihood estimation (MLE) method. MLE is the most appropriate and valid method (Hair et al. 2006). Having discussed the theoretical underpinnings of choice modelling, the next section sheds light on the software and operational details of choice data analyses for this thesis.

6.7.2 Choice data entry and analysis

In all the cases of choice models and estimation methods, a number of software packages, such as NLogit/LimDep, DisCos, R and Stata, are available to analyse the data. This thesis uses the NLogit/LimDep software package to analyse the data.

The choice data are entered in Microsoft (MS) Excel by using effects coding. In this software, data can be imported from MS Excel. The data entry format in MS Excel is given in Figure 6.3.

	A	B	C	D	E	F	G	H	I	J	K	L	M
1	Dummy	ID	No	Index	Choice	S1	NS1	H1	L1	S2	NS2	H2	L2
2	1	1	1	1	0	1	-1	1	-1	0	0	0	0
3	1	1	1	2	1	-1	1	-1	1	0	0	0	0
4	1	1	1	3	1	1	-1	-1	1	0	0	0	0
5	1	1	1	4	0	-1	1	1	-1	0	0	0	0
6	2	1	1	5	0	0	0	0	0	1	-1	1	-1
7	2	1	1	6	1	0	0	0	0	-1	1	-1	1
8	2	1	1	7	1	0	0	0	0	1	-1	-1	1
9	2	1	1	8	0	0	0	0	0	-1	1	1	-1
10	1	2	2	1	1	1	-1	1	-1	0	0	0	0
11	1	2	2	2	0	-1	1	-1	1	0	0	0	0
12	1	2	2	3	1	1	-1	-1	1	0	0	0	0
13	1	2	2	4	0	-1	1	1	-1	0	0	0	0
14	2	2	2	5	0	0	0	0	0	1	-1	1	-1
15	2	2	2	6	1	0	0	0	0	-1	1	-1	1
16	2	2	2	7	0	0	0	0	0	1	-1	-1	1
17	2	2	2	8	1	0	0	0	0	-1	1	1	-1
18	1	3	3	1	0	1	-1	1	-1	0	0	0	0
19	1	3	3	2	1	-1	1	-1	1	0	0	0	0
20	1	3	3	3	0	1	-1	-1	1	0	0	0	0
21	1	3	3	4	0	-1	1	1	-1	0	0	0	0
22	2	3	3	5	0	0	0	0	0	1	-1	1	-1
23	2	3	3	6	1	0	0	0	0	-1	1	-1	1
24	2	3	3	7	0	0	0	0	0	1	-1	-1	1
25	2	3	3	8	0	0	0	0	0	-1	1	1	-1
26	1	4	4	1	1	1	-1	1	-1	0	0	0	0
27	1	4	4	2	0	-1	1	-1	1	0	0	0	0
28	1	4	4	3	1	1	-1	-1	1	0	0	0	0
29	1	4	4	4	0	-1	1	1	-1	0	0	0	0
30	2	4	4	5	1	0	0	0	0	1	-1	1	-1

Figure 6.3 Choice data entry format

An extract from the data file is as shown in Figure 6.3, where each alternative is a row. The choice sets contain two alternatives so a choice set takes two rows. In column 1, the ‘dummy’ variable specifies the choice set number and has the same value for pairs of rows. In the second column, the variable ‘id’ specifies the respondent identification number and so has the same value over twenty rows. For this DCE, the information from each respondent takes 20 rows in the data file. Column 3 also denotes respondents’ identification numbers. Column 4, denoted by ‘index’, specifies alternative number. Column 5, labelled as ‘choice’, represents

whether the alternative is chosen or not. The alternative chosen is coded as '1', whereas the alternative not chosen is coded as '0'. Column 6, denoted by 'S1', specifies the presence of a symbol with effects coding. Column 7, denoted by 'NS1', specifies the absence of a symbol with effects coding. This column is used for verification of data entry and results. Similarly, column 8, which is denoted by 'H1', represents the high price level for product 1 with effects coding. Column 9 is denoted by 'L1', which represents the low price level for product 1 with effects coding. This column is also for verification of data entry and results. In the next columns (10–13) columns 6–9 are repeated for the second product. As mentioned, in columns 6 and 8 the two attributes are 'effects coded'. For example, the presence of the Crescent symbol is coded as 1 and absence is coded as -1. Similarly, in price levels, the high price is coded as 1 and low is coded as -1. The coding is quite opposite in columns 7 and 9, as they are included for verification only.

This given format is ready to import in NLogit/LimDep software. The menu bar of this software package provides option for importing data. Figure 6.4 shows the menu bar in NLogit and the first step to import data from the Excel file.

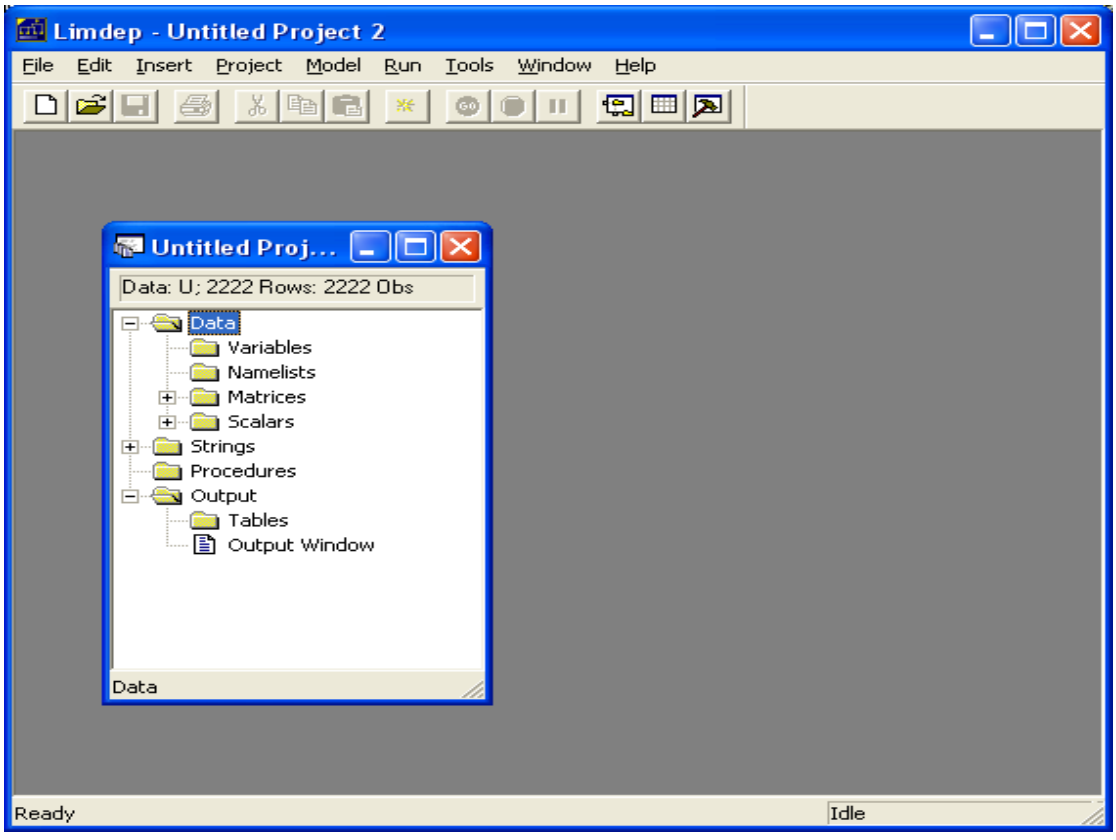
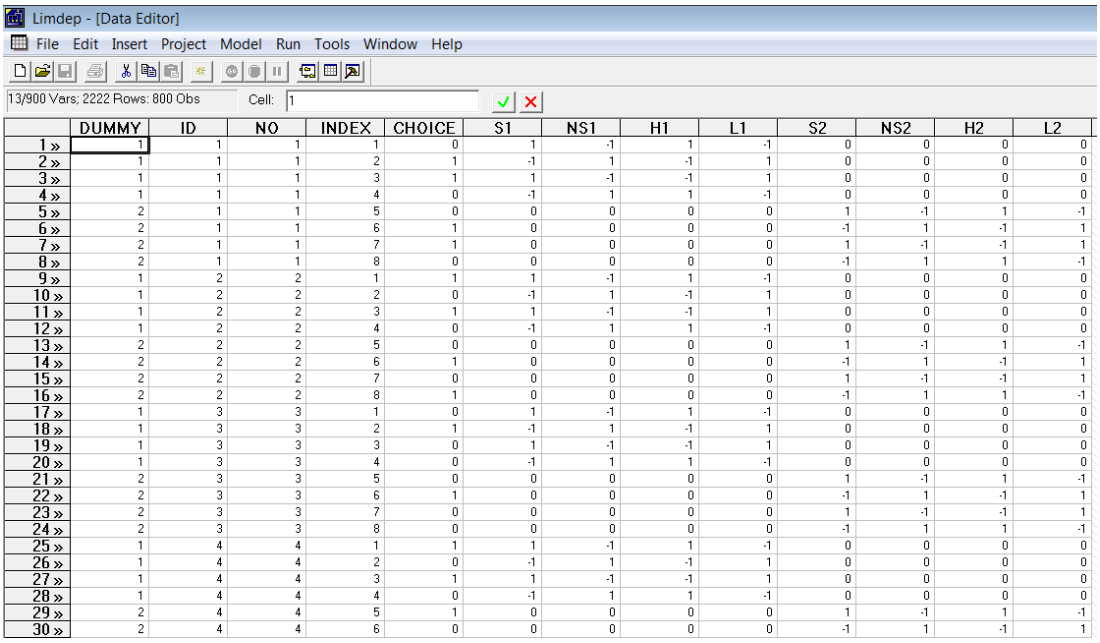


Figure 6.4 NLogit main menu

After importing the data, it looks same as in MS Excel (See Figure 6.5) and the rows and columns in this format are also same as explained for Figure 6.3.


Limdep - [Data Editor]

File Edit Insert Project Model Run Tools Window Help

13/900 Vars; 2222 Rows: 800 Obs Cell: 1

	DUMMY	ID	NO	INDEX	CHOICE	S1	NS1	H1	L1	S2	NS2	H2	L2
1 »	1	1	1	1	0	1	-1	1	-1	0	0	0	0
2 »	1	1	1	2	1	-1	1	-1	1	0	0	0	0
3 »	1	1	1	3	1	1	-1	-1	1	0	0	0	0
4 »	1	1	1	4	0	-1	1	1	-1	0	0	0	0
5 »	2	1	1	5	0	0	0	0	0	1	-1	1	-1
6 »	2	1	1	6	1	0	0	0	0	-1	1	-1	1
7 »	2	1	1	7	1	0	0	0	0	1	-1	-1	1
8 »	2	1	1	8	0	0	0	0	0	-1	1	1	-1
9 »	1	2	2	1	1	1	-1	1	-1	0	0	0	0
10 »	1	2	2	2	0	-1	1	-1	1	0	0	0	0
11 »	1	2	2	3	1	1	-1	-1	1	0	0	0	0
12 »	1	2	2	4	0	-1	1	1	-1	0	0	0	0
13 »	2	2	2	5	0	0	0	0	0	1	-1	1	-1
14 »	2	2	2	6	1	0	0	0	0	-1	1	-1	1
15 »	2	2	2	7	0	0	0	0	0	1	-1	-1	1
16 »	2	2	2	8	1	0	0	0	0	-1	1	1	-1
17 »	1	3	3	1	0	1	-1	1	-1	0	0	0	0
18 »	1	3	3	2	1	-1	1	-1	1	0	0	0	0
19 »	1	3	3	3	0	1	-1	-1	1	0	0	0	0
20 »	1	3	3	4	0	-1	1	1	-1	0	0	0	0
21 »	2	3	3	5	0	0	0	0	0	1	-1	1	-1
22 »	2	3	3	6	1	0	0	0	0	-1	1	-1	1
23 »	2	3	3	7	0	0	0	0	0	1	-1	-1	1
24 »	2	3	3	8	0	0	0	0	0	-1	1	1	-1
25 »	1	4	4	1	1	1	-1	1	-1	0	0	0	0
26 »	1	4	4	2	0	-1	1	-1	1	0	0	0	0
27 »	1	4	4	3	1	1	-1	-1	1	0	0	0	0
28 »	1	4	4	4	0	-1	1	1	-1	0	0	0	0
29 »	2	4	4	5	1	0	0	0	0	1	-1	1	-1
30 »	2	4	4	6	0	0	0	0	0	-1	1	-1	1

Figure 6.5 Data imported in Limdep

This is now ready for running the analysis. Figures 6.6 and 6.7 depict the dialogue boxes to fill in the analysis commands. In SPSS, the variables of interest are selected and the analyses are performed whereas in this software, these variables or attributes are selected and moved to the left side under utility function. Once variables of interest are moved there, it is ready for running the analysis.

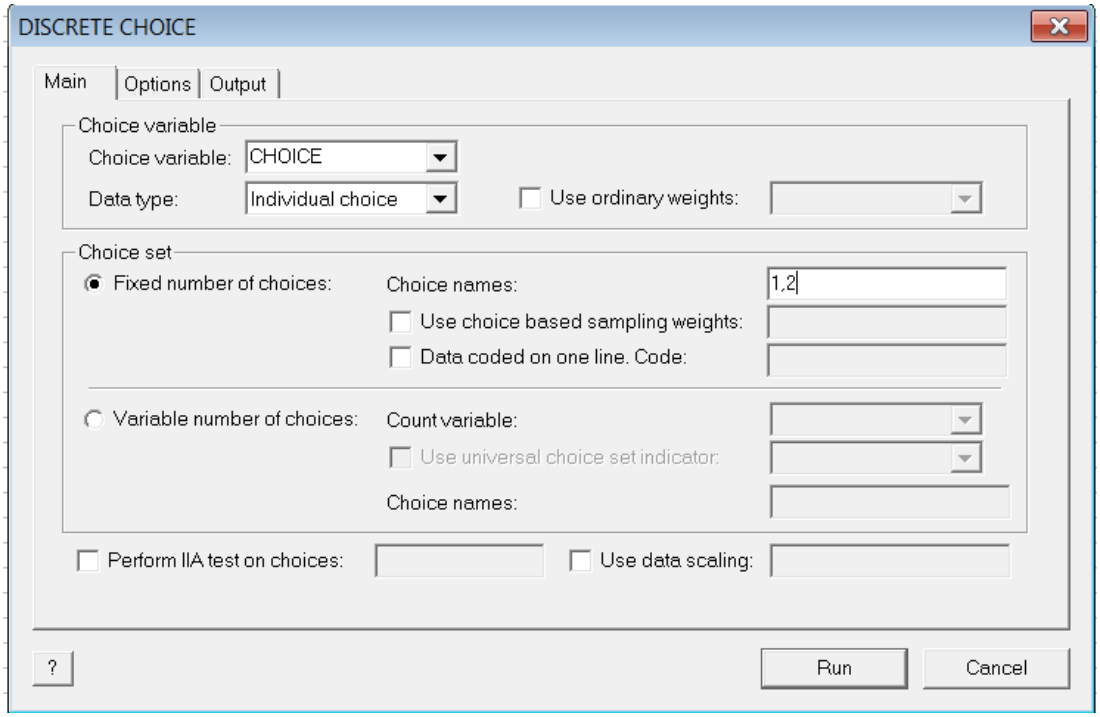


Figure 6.6 Data Analysis in NLogit/LimDep

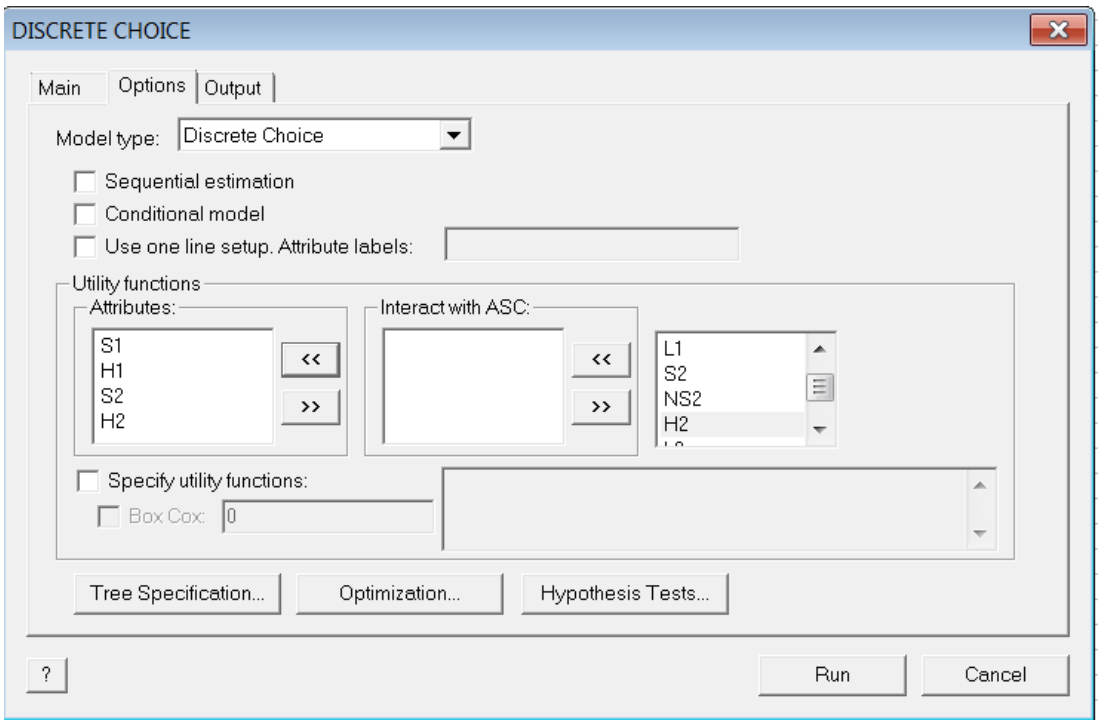


Figure 6.7 Data Analysis in NLogit/LimDep

Finally, the result is produced after running the analysis. The results are presented in the next chapter (chapter 7). Before analysing the data, however, data

were tested for relevant test assumptions. The next section gives study details about these assumption tests.

6.8 Assessing the test assumptions

The responses collected from paper and pencil questionnaires and quasi experiments were fed into Excel and imported to LimDep (for choice modelling), SPSS version 20 or AMOS version 20 as required. Before testing hypotheses, the dataset was first analysed for testing assumption. The assumptions corresponding to the statistical tests performed in this dissertation were ***random sampling, testing for demographic factors (gender and age), continuous dependent variable and normality of data distribution.*** These four assumptions are tested for all four studies and an explanation is provided if any of the assumptions are not met for the relevant datasets. Moreover, the following sections detail these four assumptions, as these are common to the datasets for all four studies. The reliability, construct validity and discriminant validity that relate to only study 4 are tested and presented in next chapter.

The next section details the first test assumption, random sampling for four studies followed by other test assumptions.

6.8.1 Test assumption1: Random sampling

The first assumption to conduct statistical tests is that the sample is selected randomly, where the sample is a true representative of the population and all cases in the population have equal chances of being selected as respondents. As mentioned previously, the first three studies involved student samples from a university in Malaysia and a university in Pakistan. Although researchers occasionally question the representation of population by student samples due to their unique characteristics (e.g., Burnett & Dune 1986; Wells 1993), these samples are less influenced by experience and thus reduce the confounding factors, making them more useful (Hofstede 1991). Therefore, many consumer behaviour researchers use student samples as substitutes for consumers, for example: warranty and consumers' risk perceptions (Shimp & Bearden 1982); country of origin; attitude towards advertising; attitude preference relationship (Yavas 1994); product warnings and safe behaviour (Cox III et al. 1997); price quality perceptions (Lichtenstein & Burton

1989); dissonance reduction behaviour (Sheth 1970); self-identity acculturation (Ownbey & Horridge 1998); and hiring recommendations (Olian, Schwab & Haberfeld 1988).

In light of these examples, therefore, the use of student samples for the first three exploratory studies of this thesis is justified. However, in order to add generalisability and vigour to the analyses and results, study 4 recruited a consumer sample, where the data resembled the actual population in the country. Further detail is provided in sample characteristics of study 4.

Having discussed the first assumption of statistical tests, the later sections details how the data are analysed to test the confounding influence of sample demographics, if any. Sample characteristic and procedure are demonstrated with every study prior to the results for demographic factors for all four studies.

6.8.2 Test assumption 2: Testing for demographic factors (gender and age)

As mentioned, the second assumption for statistical tests is to see if the demographic factors of the sample have any confounding effect. Therefore, in this section, sample characteristics are discussed and confounding effects of gender and age are tested.

Study 1: Sample characteristics

The process of data collection is detailed in a previous section (data collection procedure). Study 1 was conducted in Malaysia. The dataset of study 1 contained responses to a quasi-type experiment from a sample of 100 students in a Malaysian university. Of the 100 cases, four incomplete responses were deleted, resulting in 96 useable questionnaires. Therefore, the use of this sample is suitable and appropriate for this research context. The sample consisted of 31 per cent male and 69 per cent female participants. Age ranged from 18 to 38 years, with a mean of 22 years.

Testing for confounding effects of gender

As mentioned, the sample of this study consisted of 31 per cent male and 69 per cent female participants from Malaysia. The difference to responses was measured among males and females for all the eight items used for this study. These items, anchored on a seven-point scale, measured respondents' ratings for both of the products (milk and a pen) at both price levels (high and low). An independent sample *t*-test was

performed in order to determine if the responses differed between genders. The mean rating score of male respondents was compared to the mean rating score of female respondents (to the product package with a symbol and to the product package without a symbol). The results showed that there was no significance difference between male and female respondents (see Tables 6.3a and 6.3b). Table 6.3a shows the group statistics and 6.3b shows independent sample *t*-test results. Hence, gender does not hold any confounding influence on the variable of interest: attitude towards product package with and without a religious symbol.

Table 6.3a Group Statistics by gender for Study 1

Product Rating	Gender	N	Mean	Std. Deviation	Std. Error Mean
Milk with symbol High price	Female	50	6.06	0.998	0.141
	Male	21	5.9	1.221	0.266
Milk without symbol Low price	Female	15	5.8	1.656	0.428
	Male	10	4.4	2.011	0.636
Milk with symbol Low price	Female	52	6.35	0.814	0.113
	Male	23	5.91	1.311	0.273
Milk without symbol High price	Female	7	5	1.155	0.436
	Male	2	4.5	0.707	0.5
Pen with symbol High price	Female	35	5.89	0.993	0.168
	Male	9	5.78	1.202	0.401
Pen without symbol Low price	Female	30	5.57	1.006	0.184
	Male	17	6.06	1.029	0.25
Pen with symbol Low price	Female	48	6.08	1.028	0.148
	Male	23	6.13	0.92	0.192
Pen without symbol High price	Female	10	5.2	0.919	0.291
	Male	2	5.5	2.121	1.5

Table 6.3b An independent *t*-test for Study 1

Product Rating		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Milk with symbol High Price	Equal variances assumed	0.566	0.454	0.559	69.00	0.578	0.155	0.278	-0.399	0.709
	Equal variances not assumed			0.515	31.78	0.61	0.155	0.301	-0.459	0.77
Milk without symbol Low Price	Equal variances assumed	0.47	0.5	1.902	23.00	0.07	1.4	0.736	-0.123	2.923
	Equal variances not assumed			1.827	16.77	0.086	1.4	0.766	-0.219	3.019
Milk with symbol Low Price	Equal variances assumed	4.51	0.037	1.746	73.00	0.085	0.433	0.248	-0.061	0.927
	Equal variances not assumed			1.464	29.76	0.154	0.433	0.296	-0.171	1.037
Milk without symbol High Price	Equal variances assumed	0.486	0.508	0.566	7.00	0.589	0.5	0.884	-1.589	2.589
	Equal variances not assumed			0.753	2.83	0.509	0.5	0.664	-1.686	2.686
Pen with symbol High Price	Equal variances assumed	0.423	0.519	0.279	42.00	0.782	0.108	0.387	-0.674	0.89
	Equal variances not assumed			0.248	10.98	0.808	0.108	0.434	-0.848	1.064
Pen without symbol Low Price	Equal variances assumed	0.21	0.649	-1.6	45.00	0.117	-0.492	0.308	-1.112	0.128
	Equal variances not assumed			-1.59	32.74	0.122	-0.492	0.31	-1.123	0.139
Pen with symbol Low Price	Equal variances assumed	0.358	0.552	-0.19	69.00	0.852	-0.047	0.252	-0.55	0.456
	Equal variances not assumed			-0.19	48.15	0.847	-0.047	0.242	-0.535	0.44
Pen without symbol High Price	Equal variances assumed	3.518	0.09	-0.35	10.00	0.732	-0.3	0.852	-2.198	1.598
	Equal variances not assumed			-0.2	1.08	0.875	-0.3	1.528	-16.75	16.145

Testing for confounding effects of age

For the sample in study 1, age ranged from 18 to 38 years, with a mean of 22 years. In order to test if age has any confounding influence on the attitude of respondents towards the use of religious symbols on product packaging, a one-way analysis of variance (ANOVA) was used. There were no significant differences on seven out of the eight items used to measure attitude towards a product package with symbol or a product package without symbol. The only item where age made some significant difference was the rating of milk with a symbol when the price was low. This was significant at .03 level. Overall, age does not have any confounding effect (see Table 6.4).

Table 6.4 An analysis of variance test to examine differences along age of the respondents for study 1

Product Rating		Sum of Squares	df	Mean Square	F	Sig.
Milk with symbol High price	Between groups	3.336	7	0.477	0.49	0.839
	Within groups	61.312	63	0.973		
	Total	64.648	70			
Milk without symbol Low price	Between groups	8.352	5	1.67	0.406	0.839
	Within groups	78.208	19	4.116		
	Total	86.56	24			
Milk with symbol Low price	Between groups	12.834	8	1.604	2.359	0.027
	Within groups	44.206	65	0.68		
	Total	57.041	73			
Milk without symbol High price	Between groups	1.389	4	0.347	0.185	0.934
	Within groups	7.5	4	1.875		
	Total	8.889	8			
Pen with symbol High price	Between groups	10.103	6	1.684	1.769	0.131
	Within groups	37.114	39	0.952		
	Total	47.217	45			
Pen without symbol Low price	Between groups	6.22	7	0.889	0.813	0.582
	Within groups	41.519	38	1.093		
	Total	47.739	45			
Pen with symbol Low price	Between groups	7.931	8	0.991	1.008	0.439
	Within groups	61.944	63	0.983		
	Total	69.875	71			
Pen without symbol High price	Between groups	1.417	4	0.354	0.331	0.849
	Within groups	7.5	7	1.071		
	Total	8.917	11			

Study 2: Sample characteristics

The experimental procedure and other settings used in this study were the same as for study 1; however, the data for this study were collected from Pakistan. The study involved students in a Pakistani university (n=245). There were 226 useable questionnaires after deleting 19 with missing values. The sample consisted of 63 per cent male and 37 per cent female and age ranged from 17 to 46 years with a mean of 21 years.

Testing for confounding effects of gender

As mentioned, the sample of this study consisted of 63 per cent male and 37 per cent female participants from Pakistan. The difference to responses was measured along male and female lines for all the eight items used for this study. These items, anchored on a seven-point scale, measured the ratings of Pakistani respondents for both of the products (milk and a pen) at both price levels (high and low). An independent sample *t*-test was performed in order to test if the responses differed along gender lines. The mean rating score of male respondents was compared to the mean rating score of female respondents (regarding the product package with a symbol and of the product package without a symbol). The results showed that there was no significance difference between male and female respondents (see Tables 6.5a and 6.5b). Table 6.5a provides group statistics and Table 6.5b provides results of the independent sample *t*-test for gender. Hence, gender does not hold any confounding influence on the variable of interest: attitude towards product packages with and without a religious symbol.

Table 6.5a Group statistics along gender for Study 2

Product Rating	Gender	N	Mean	Std. Deviation	Std. Error Mean
Milk with symbol High price	Female	46	5.52	1.169	0.172
	Male	80	5.44	1.33	0.149
Milk without symbol Low price	Female	39	5.67	0.737	0.118
	Male	57	5.44	0.945	0.125
Milk with symbol Low price	Female	64	5.58	0.922	0.115
	Male	109	5.71	1.125	0.108
Milk without symbol High price	Female	20	5.25	1.86	0.416
	Male	33	5.39	0.966	0.168
Pen with symbol High price	Female	39	5.31	1.592	0.255
	Male	88	5.63	1.392	0.148
Pen without symbol Low price	Female	45	5.71	1.141	0.17
	Male	56	5.59	0.949	0.127
Pen with symbol Low price	Female	61	5.79	1.171	0.15
	Male	105	5.85	1.199	0.117
Pen without symbol High price	Female	23	5.57	1.59	0.332
	Male	33	5.06	1.713	0.298

Table 6.5b An independent sample t-test to examine gender differences for Study 2

Product Rating		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Milk with symbol	Equal variances assumed	1.486	0.225	0.357	124.0	0.721	0.084	0.236	-0.382	0.551
High Price	Equal variances not assumed			0.37	104.1	0.712	0.084	0.228	-0.367	0.536
Milk without symbol	Equal variances assumed	3.346	0.071	1.265	94.0	0.209	0.228	0.18	-0.13	0.586
Low Price	Equal variances not assumed			1.325	92.3	0.188	0.228	0.172	-0.114	0.57
Milk with symbol	Equal variances assumed	3.742	0.055	-0.77	171.0	0.441	-0.128	0.166	-0.456	0.2
Low Price	Equal variances not assumed			-0.81	153.0	0.417	-0.128	0.158	-0.44	0.183
Milk without symbol	Equal variances assumed	5.522	0.023	-0.37	51.0	0.712	-0.144	0.388	-0.923	0.635
High Price	Equal variances not assumed			-0.32	25.3	0.751	-0.144	0.449	-1.067	0.78
Pen with symbol	Equal variances assumed	0.879	0.35	-1.13	125.0	0.259	-0.317	0.28	-0.872	0.237
High Price	Equal variances not assumed			-1.08	64.9	0.286	-0.317	0.295	-0.906	0.272
Pen without symbol	Equal variances assumed	0.317	0.575	0.586	99.0	0.559	0.122	0.208	-0.291	0.534
Low Price	Equal variances not assumed			0.574	85.4	0.567	0.122	0.212	-0.3	0.544
Pen with symbol	Equal variances assumed	0.403	0.527	-0.32	164.0	0.751	-0.061	0.191	-0.439	0.317
Low Price	Equal variances not assumed			-0.32	128.0	0.75	-0.061	0.19	-0.437	0.316
Pen without symbol	Equal variances assumed	0.158	0.692	1.116	54.0	0.269	0.505	0.452	-0.402	1.411
High Price	Equal variances not assumed			1.132	49.6	0.263	0.505	0.446	-0.391	1.401

Testing for confounding effects of age

For the sample in study 2, age ranged from 17 to 46 years, with a mean of 21 years. In order to test if age has any confounding influence on the attitude of respondents towards the use of religious symbols on product packaging, a one-way ANOVA was used. There were no significant differences on seven out of the eight items used to measure attitude towards a product package with symbol or a product package without symbol. The only item where age made a significant difference was the rating of milk without a symbol when the price was low. This was significant at .05. Overall, age does not have any confounding effect (see Table 6.6).

Table 6.6 An analysis of variance test to examine differences along age for Study 2

Product Rating		Sum of Squares	df	Mean Square	F	Sig.
Milk with symbol High price	Between groups	15.481	11	1.407	0.819	0.621
	Within groups	188.945	110	1.718		
	Total	204.426	121			
Milk without symbol Low price	Between groups	10.605	8	1.326	2.063	0.048
	Within groups	54.629	85	0.643		
	Total	65.234	93			
Milk with symbol Low price	Between groups	6.464	9	0.718	0.63	0.77
	Within groups	181.311	159	1.14		
	Total	187.775	168			
Milk without symbol High price	Between groups	4.817	8	0.602	0.289	0.966
	Within groups	89.703	43	2.086		
	Total	94.519	51			
Pen with symbol High price	Between groups	36.947	10	3.695	1.738	0.08
	Within groups	244.521	115	2.126		
	Total	281.468	125			
Pen without symbol Low price	Between groups	11.815	9	1.313	1.333	0.232
	Within groups	86.685	88	0.985		
	Total	98.5	97			
Pen with symbol Low price	Between groups	16.767	10	1.677	1.32	0.224
	Within groups	191.733	151	1.27		
	Total	208.5	161			
Pen without symbol High price	Between groups	24.05	9	2.672	1.311	0.258
	Within groups	91.695	45	2.038		
	Total	115.745	54			

***Study 3:* Sample characteristics and procedure**

The experiment, measurement and procedures similar to those in study 1 and study 2 were employed in this study but using two local languages: Malay in Malaysia and Urdu in Pakistan, along with English. Both questionnaires were identical, except the language. The questionnaire was first developed in English. Following common back-translation procedures (Craig & Douglas, 2005), a native speaker translated in Malay (for Malaysia) and a professional translator translated the questionnaires into Urdu (for Pakistan), followed by a translation back to English to check for consistency and accuracy. There were no significant differences, other than minor adjustments of propositions.

The questionnaires of both languages were randomly distributed to the sample in two countries, resulting in a between subjects design. For example, in Malaysia, respondents viewed either a product package in English or a product package in Malay. Respondents were randomly assigned to one of the two groups to see either local language packages or English packages. In Pakistan, responses were obtained for Urdu and English languages.

The Malaysian sample involved students at a university in Malaysia; 200 Muslim students were equally and randomly assigned to two groups. There were 142 female (73 per cent) and 53 male (27 per cent) in the useable dataset. Age ranged from 18 years to 38 years, with a median age of 22 and the mean age was also 22 years. The design was identical, except that one group worked in the Malay language and the other in English.

The Pakistani sample involved students from a Pakistani university (n=480). There were 451 useable questionnaires after deleting 29 with missing values. The sample was 60 per cent male and 40 per cent female and age ranged from 17 to 46 years, with a mean of 21 years.

In both countries, respondents were not given tokens or credit for participation. The next section discusses the confounding effects of gender and age for both the Malaysian and Pakistani samples.

Testing for confounding effects of gender; Malaysian sample

As mentioned, the Malaysian sample comprised 73 per cent females and 27 per cent males in the useable dataset. An independent sample *t*-test was performed in order to test if the responses differed according to gender for the Malaysian sample. The results showed that there was no significance difference between male and female

respondents but for one item: the rating for milk with a symbol when the price was low ($p < .04$) (see Tables 6.7a and 6.7b). Table 6.7a shows group statistics and Table 6.7b shows results for the independent sample *t*-test. Hence, overall, gender does not hold any confounding influence on the variable of interest: attitude towards product packages with a religious symbol.

Table 6.7a Group statistics by gender for Study 3 (Malaysian sample)

Product Rating	Gender	N	Mean	Std. Deviation	Std. Error Mean
Milk with symbol High price	Female	104	6.01	0.898	0.088
	Male	35	5.83	1.2	0.203
Milk with symbol Low price	Female	118	6.25	0.786	0.072
	Male	45	5.98	1.118	0.167
Pen with symbol High price	Female	77	6.01	1.07	0.122
	Male	18	5.83	1.043	0.246
Pen with symbol Low price	Female	111	6.19	0.958	0.091
	Male	43	5.81	1.075	0.164

Table 6.7b An independent *t*-test to examine gender differences for study 3 (Malaysian sample)

Product Rating		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Milk with symbol High price	Equal variances assumed	4.631	0.033	0.944	137.00	0.347	0.181	0.192	-0.198	0.56
	Equal variances not assumed			0.819	47.45	0.417	0.181	0.221	-0.264	0.626
Milk with symbol Low price	Equal variances assumed	3.522	0.062	1.774	161.00	0.078	0.276	0.156	-0.031	0.584
	Equal variances not assumed			1.522	61.36	0.133	0.276	0.182	-0.087	0.64
Pen with symbol High price	Equal variances assumed	0.021	0.886	0.644	93.00	0.521	0.18	0.279	-0.374	0.733
	Equal variances not assumed			0.655	26.04	0.518	0.18	0.274	-0.384	0.744
Pen with symbol Low price	Equal variances assumed	0.32	0.572	2.106	152.00	0.037	0.375	0.178	0.023	0.727
	Equal variances not assumed			2.002	69.35	0.049	0.375	0.187	0.001	0.749

Testing for confounding effects of gender: Pakistani sample

As mentioned, the Pakistani sample involved students from a Pakistani university (n=480). The sample consisted of 60 per cent male and 40 per cent female participants from Pakistan. The difference to responses was measured for males and females for all four items used for this study. These items, anchored on a seven-point scale, measured the ratings of Pakistani and Malaysian respondents for both of the products (milk and a pen) at both price levels (high and low). An independent sample *t*-test was performed in order to test if the responses differed between genders for the Pakistani sample first. The mean rating score of male respondents was compared to the mean rating score of female respondents for the product package with a symbol. The results showed that there was no significance difference between male and female respondents (Tables 6.8a and 6.8b). Table 6.8a shows group statistics and Table 6.8b shows results of independent sample *t*-test. Hence, gender does not hold any confounding influence on the variable of interest: attitude towards product packages with a religious symbol.

Table 6.8a Group statistics by gender for Study 3 (Pakistani sample)

Product Rating	Gender	N	Mean	Std. Deviation	Std. Error Mean
Milk with symbol High price	Female	117	5.52	1.08	0.1
	Male	176	5.59	1.221	0.092
Milk with symbol Low price	Female	110	5.65	1.154	0.11
	Male	166	5.66	1.11	0.086
Pen with symbol High price	Female	83	5.48	1.451	0.159
	Male	156	5.65	1.228	0.098
Pen with symbol Low price	Female	141	5.87	1.094	0.092
	Male	198	5.88	1.154	0.082

Table 6.8b An independent sample *t*-test to examine gender differences for Study 3 (Pakistani sample)

Product Rating		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Milk with symbol High Price	Equal variances assumed	0.966	0.327	-0.459	291	0.647	-0.064	0.139	-0.338	0.21
	Equal variances not assumed			-0.47	268.43	0.638	-0.064	0.136	-0.331	0.203
Milk with symbol Low Price	Equal variances assumed	0.624	0.43	-0.081	274	0.936	-0.011	0.139	-0.284	0.262
	Equal variances not assumed			-0.08	227.25	0.936	-0.011	0.14	-0.287	0.264
Pen with symbol High Price	Equal variances assumed	2.431	0.12	-0.93	237	0.353	-0.166	0.178	-0.516	0.185
	Equal variances not assumed			-0.884	145.19	0.378	-0.166	0.187	-0.535	0.204
Pen with symbol Low Price	Equal variances assumed	1.116	0.292	-0.092	337	0.926	-0.011	0.124	-0.256	0.233
	Equal variances not assumed			-0.093	310.92	0.926	-0.011	0.123	-0.254	0.231

Testing for confounding effects of age: Malaysian sample

In this sample, age ranged from 18 years to 38 years, with a median age of 22. The mean age was also 22 years for Malaysian sample. Again, in order to test, if age has any confounding influence on the attitude of respondents towards the use of religious symbols on product packaging, a one-way ANOVA was used. There were no significant differences on any item used to measure attitude towards a product package with a symbol. Thus, age does not have any confounding effect for this sample as well (see Table 6.9).

Table 6.9 An analysis of variance test to examine differences by age for study 3 (Malaysian sample)

Product Rating		Sum of Squares	df	Mean Square	F	Sig.
Milk with symbol High price	Between groups	3.289	7	0.47	0.532	0.809
	Within groups	115.704	131	0.883		
	Total	118.993	138			
Milk with symbol Low price	Between groups	9.02	9	1.002	1.467	0.165
	Within groups	103.845	152	0.683		
	Total	112.864	161			
Pen with symbol High price	Between groups	4.958	6	0.826	0.722	0.633
	Within groups	103.001	90	1.144		
	Total	107.959	96			
Pen with symbol Low price	Between groups	10.134	9	1.126	1.123	0.35
	Within groups	145.414	145	1.003		
	Total	155.548	154			

Testing for confounding effects of age: Pakistani sample

Age ranged from 17 to 46 years, with a mean of 21 years for the Pakistani sample. In order to test if age has any confounding influence on the attitude of respondents towards the use of religious symbols on product packaging, a one-way ANOVA was used. There were no significant differences on any item used to measure attitude towards a product package with a symbol or a product package without a symbol. Thus, age does not have any confounding effect for this sample (see Table 6.10).

Table 6.10 An analysis of variance test to examine differences by age for Study 3 (Pakistani sample)

Product Rating		Sum of Squares	df	Mean Square	F	Sig.
Milk with symbol High price	Between groups	21.319	17	1.254	0.897	0.578
	Within groups	380.078	272	1.397		
	Total	401.397	289			
Milk with symbol Low price	Between groups	14.19	13	1.092	0.863	0.593
	Within groups	330.007	261	1.264		
	Total	344.196	274			
Pen with symbol High price	Between groups	39.781	14	2.842	1.651	0.068
	Within groups	382.025	222	1.721		
	Total	421.806	236			
Pen with symbol Low price	Between groups	25.254	16	1.578	1.312	0.187
	Within groups	381.228	317	1.203		
	Total	406.482	333			

Study 4: Sample characteristics and procedure

In order to see the differential effects of two dimensions of religiosity along products of high and low symbolic value, study 4 involved a consumer sample from Pakistan. Out of 250 questionnaires distributed to a convenience consumer sample in Pakistan, 197 filled in responses were obtained (79 per cent response rate). Further, 16 responses were deleted due to missing values, resulting in 181 useable responses. There were 88 females (49 per cent) and 93 males (51 per cent). The sample resembles the general population in Pakistan, which is 48 per cent females and 52 per cent males (see Table 6.11). The sex ratio is 1.06 males (CIA 2010).

Table 6.11 Distribution of sample data

Gender	Census Spread	Sample Data	
Male	52%	93	51%
Female	48%	88	49%
Total	100%	181	100%

Testing for confounding effects of gender

As mentioned, the sample used in this study comprised 49 per cent females and 51 per cent males. The difference to responses was measured for males and females for all four items used for this study. These items, anchored on a seven-point scale, measured rating of Pakistani consumers for both high (milk) and low (film DVD) symbolic value products at both price levels (high and low). An independent sample *t*-test was performed in order to determine if the responses differed between genders for this sample. The mean rating score of male respondents was compared to the mean rating score of female respondents for the product package with a symbol. The results showed that there was no significance difference between male and female respondents, except one item: the rating of pen with a symbol when the price was high (see Tables 6.12a and 6.12b). Table 6.12a shows group statistics and Table 6.12b shows the results of the independent sample *t*-test. Hence, overall, gender does not hold any confounding influence on the variable of interest: attitude towards product packages with a religious symbol.

Table 6.12a Group statistics by gender for Study 4

Product Rating	Gender	N	Mean	Std. Deviation	Std. Error Mean
Milk with symbol High price	Female	64	5.97	1.208	0.151
	Male	53	5.89	1.05	0.144
Milk with symbol Low price	Female	77	6.03	0.903	0.103
	Male	75	5.77	1.311	0.151
Pen with symbol High price	Female	63	5.87	1.055	0.133
	Male	52	5.4	1.225	0.17
Pen with symbol Low price	Female	74	6.07	0.941	0.109
	Male	70	5.81	1.146	0.137

Table 6.12b An independent sample *t*-test to examine gender differences for Study 4

Product Rating		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Milk with symbol High Price	Equal variances assumed	0.163	0.687	0.387	115	0.699	0.082	0.212	-0.337	0.501
	Equal variances not assumed			0.393	114.71	0.695	0.082	0.209	-0.332	0.496
Milk with symbol Low Price	Equal variances assumed	13.803	0	1.387	150	0.168	0.253	0.182	-0.107	0.613
	Equal variances not assumed			1.38	130.96	0.17	0.253	0.183	-0.109	0.615
Pen with symbol High Price	Equal variances assumed	1.963	0.164	2.207	113	0.029	0.469	0.213	0.048	0.89
	Equal variances not assumed			2.175	101.32	0.032	0.469	0.216	0.041	0.897
Pen with symbol Low Price	Equal variances assumed	0.768	0.382	1.453	142	0.148	0.253	0.174	-0.091	0.598
	Equal variances not assumed			1.445	133.7	0.151	0.253	0.175	-0.093	0.6

Testing for confounding effects of age

Age ranged from 18 years to 62 years with mean age of 35 years and median age of 32 years for this sample. In order to test if age has any confounding influence on the attitude of respondents towards the use of religious symbols on product packaging, a one-way ANOVA was used. There were significant differences along three items used to measure attitude towards a product package with symbol. Thus, age has confounding effect for this sample (see Table 6.13).

Table 6.13 An analysis of variance test to examine differences by age for Study 4

Product Rating		Sum of Squares	df	Mean Square	F	Sig.
Milk with symbol High price	Between groups	62.153	34	1.828	1.717	0.025
	Within groups	87.3	82	1.065		
	Total	149.453	116			
Milk with symbol Low price	Between groups	82.179	38	2.163	2.421	0.0
	Within groups	99.155	111	0.893		
	Total	181.333	149			
Pen with symbol High price	Between groups	66.129	34	1.945	1.817	0.015
	Within groups	85.645	80	1.071		
	Total	151.774	114			
Pen with symbol Low price	Between groups	48.277	34	1.42	1.403	0.097
	Within groups	109.275	108	1.012		
	Total	157.552	142			

This section has so far discussed the potential confounding effect of demographic variables. Although there were minor confounding effects found in the data analyses, overall gender and age did not affect the variable of interest. The following section briefly discusses the next test assumption, the nature of dependent variables for these studies.

6.8.3 Test assumption 3: Binary and Continuous Scale of dependent variable

The dependent variable in the first three studies is the behaviour of the respondents, shown as a binary option as well as a Likert-type scale (seven points). In behaviour measurement, where choice served as a proxy to behaviour, the respondents selected a product package with a religious symbol or a product package without a religious

symbol. This binary variable is a type of categorical variable. Later the responses were coded either 0 or 1, where 0 was for ‘not selected’ and 1 was for ‘selected’. The theoretical background for analysing choice experiments is elaborated in a prior section of this chapter. Appropriate tests for such variables include choice modelling, which is explained in next chapter.

The other dependent variable in all four studies is the attitude towards the product package. This is a continuous variable but the study used the Likert-type scale, where respondents can score anywhere along its range. Likert-type scales can be used to measure such variables in marketing and consumer behaviour studies (Churchill Jr 1979). The thesis used the recommended seven-point scale, ranging from the highest on one end to the lowest on the other end. As discussed earlier, such scales are traditionally used in psychology and consumer behaviour studies. Similarly, intrinsic religiosity and extrinsic religiosity were also measured on a seven-point scale. Therefore, this assumption is fulfilled for conducting statistical test, as points on scale are assumed equal. Thus, the test assumption for equal scale of dependent variables is fulfilled.

After testing three of the test assumptions, the next section tests for normality of data distribution. The test assumptions, such as reliability and construct validity, relate more to study 4 and therefore are explored further in next chapter, along with study 4.

6.8.4 Test assumption 4: Normality of distribution

The third assumption for performing statistical tests is normality of distribution. The responses to a construct should be normally distributed within the population; these should follow a bell curve with few extremes. Testing for normality revealed that most of the measures failed the relevant kurtosis and skewness tests and Kolmogorov-Smirnov statistics, with a significance level less than .05, and hence were non-normal (see Tables 6.14a to 6.14b). The following tables provide normality tests for all four studies.

Table 6.14a General statistics for test of normality of data distribution for Study 1

Statistics		Product Rating							
		Milk with symbol High Price	Milk without symbol Low Price	Milk with symbol Low Price	Milk without symbol High Price	Pen with symbol High Price	Pen without symbol Low Price	Pen with symbol Low Price	Pen without symbol High Price
N	Valid	73	25	76	9	46	48	73	13
	Missing	27	75	24	91	54	52	27	87
Mean		6.01	5.24	6.22	4.89	5.87	5.73	6.12	5.23
Std. Error of Mean		0.124	0.38	0.115	0.351	0.151	0.148	0.115	0.281
Median		6	6	6.5	5	6	6	6	5
Std. Deviation		1.061	1.899	1.001	1.054	1.024	1.026	0.985	1.013
Skewness		-1.249	-1.248	-1.614	1.094	-0.377	-0.408	-0.791	-0.539
Std. Error of Skewness		0.281	0.464	0.276	0.717	0.35	0.343	0.281	0.616
Kurtosis		2.057	0.927	3.343	0.611	-1.041	-0.901	-0.522	1.089
Std. Error of Kurtosis		0.555	0.902	0.545	1.4	0.688	0.674	0.555	1.191
Minimum		2	1	2	4	4	4	4	3
Maximum		7	7	7	7	7	7	7	7

Table 6.14b Test for normality of data distribution for Study 1: One-Sample Kolmogorov-Smirnov test

Statistics		Product rating							
		Milk with symbol High price	**Milk without symbol Low price**	**Milk with symbol Low price**	**Milk without symbol High price**	**Pen with symbol High price**	**Pen without symbol Low price**	**Pen with symbol Low price**	**Pen without symbol High price**
N		73	25	76	9	46	48	73	13
Normal Parameters[a,b]	Mean	6.01	5.24	6.22	4.89	5.87	5.73	6.12	5.23
	Std. Deviation	1.061	1.899	1.001	1.054	1.024	1.026	0.985	1.013
Most extreme differences	Absolute	0.221	0.21	0.281	0.245	0.213	0.25	0.279	0.256
	Positive	0.176	0.177	0.219	0.245	0.172	0.146	0.187	0.206
	Negative	-0.221	-0.21	-0.281	-0.2	-0.213	-0.25	-0.279	-0.256
Kolmogorov-Smirnov Z		1.889	1.049	2.449	0.735	1.444	1.732	2.384	0.923
Asymp. Sig. (2-tailed)		0.002	0.222	0	0.653	0.031	0.005	0	0.362

a. Test distribution is Normal.

b. Calculated from data

Table 6.15a General statistics for test of normality of data distribution for Study 2

Statistics		Product rating							
		Milk with symbol High price	**Milk without symbol Low price**	**Milk with symbol Low price**	**Milk without symbol High price**	**Pen with symbol High price**	**Pen without symbol Low price**	**Pen with symbol Low price**	**Pen without symbol High price**
N	Valid	136	97	181	56	135	105	173	61
	Missing	109	148	64	189	110	140	72	184
Mean		5.46	5.54	5.63	5.39	5.44	5.63	5.77	5.31
Std. Error of Mean		0.112	0.088	0.082	0.18	0.132	0.1	0.091	0.207
Median		6	6	6	6	6	6	6	6
Std. Deviation		1.31	0.867	1.101	1.344	1.539	1.021	1.201	1.618
Skewness		-1.613	-0.603	-0.89	-1.417	-1.253	-1.073	-1.144	-1.089
Std. Error of Skewness		0.208	0.245	0.181	0.319	0.209	0.236	0.185	0.306
Kurtosis		3.295	0.417	1.683	2.878	1.344	3.216	1.795	0.737
Std. Error of Kurtosis		0.413	0.485	0.359	0.628	0.414	0.467	0.367	0.604
Minimum		1	3	1	1	1	1	1	1
Maximum		7	7	7	7	7	7	7	7

Table 6.15b Test for Normality of data distribution for Study 2: One-Sample Kolmogorov-Smirnov test

Statistics		Product Rating							
		Milk with symbol High price	Milk without symbol Low price	Milk with symbol Low price	Milk without symbol High price	Pen with symbol High price	Pen without symbol Low price	Pen with symbol Low price	Pen without symbol High price
N		136	97	181	56	135	105	173	61
Normal Parameters[a,b]	Mean	5.46	5.54	5.63	5.39	5.44	5.63	5.77	5.31
	Std. Deviation	1.31	0.867	1.101	1.344	1.539	1.021	1.201	1.618
Most extreme differences	Absolute	0.262	0.281	0.19	0.21	0.209	0.213	0.216	0.206
	Positive	0.179	0.203	0.158	0.147	0.156	0.168	0.154	0.148
	Negative	-0.262	-0.281	-0.19	-0.21	-0.209	-0.213	-0.216	-0.206
Kolmogorov-Smirnov Z		3.054	2.768	2.552	1.571	2.424	2.186	2.842	1.607
Asymp. Sig. (2-tailed)		0	0	0	0.014	0	0	0	0.011

a. Test distribution is Normal

b. Calculated from data

Table 6.16a General statistics for test of normality of data distribution for Study 3 (Malaysian sample)

Product Rating	N	Mean	Std. Deviation	Minimum	Maximum
Milk with symbol High Price	141	5.96	0.981	2	7
Milk with symbol Low Price	164	6.18	0.895	2	7
Pen with symbol High Price	97	5.98	1.06	1	7
Pen with symbol Low Price	156	6.1	1.002	3	7

Table 6.16b Test for normality of data distribution for Study 3 (Malaysian sample): One-Sample Kolmogorov-Smirnov test

Statistics		Product Rating							
		Milk with symbol High price	Milk without symbol Low price	Milk with symbol Low price	Milk without symbol High price	Pen with symbol High price	Pen without symbol Low price	Pen with symbol Low price	Pen without symbol High price
N		136	97	181	56	135	105	173	61
Normal Parameters[a,b]	Mean	5.46	5.54	5.63	5.39	5.44	5.63	5.77	5.31
	Std. Deviation	1.31	0.867	1.101	1.344	1.539	1.021	1.201	1.618
Most extreme differences	Absolute	0.262	0.281	0.19	0.21	0.209	0.213	0.216	0.206
	Positive	0.179	0.203	0.158	0.147	0.156	0.168	0.154	0.148
	Negative	-0.262	-0.281	-0.19	-0.21	-0.209	-0.213	-0.216	-0.206
Kolmogorov-Smirnov Z		3.054	2.768	2.552	1.571	2.424	2.186	2.842	1.607
Asymp. Sig. (2-tailed)		0	0	0	0.014	0	0	0	0.011

a. Test distribution is Normal

b. Calculated from data

Table 6.17a General statistics for test of normality of data distribution for Study 3 (Pakistani sample)

Product Rating	N	Mean	Std. Deviation	Minimum	Maximum
Milk with symbol High Price	314	5.57	1.176	1	7
Milk with symbol Low Price	297	5.65	1.141	1	7
Pen with symbol High Price	256	5.57	1.359	1	7
Pen with symbol Low Price	358	5.88	1.135	1	7

Table 6.17b Test for normality of data distribution for Study 3 (Pakistani sample): One-Sample Kolmogorov-Smirnov test

Statistics		Product Rating			
		Milk with symbol High price	Milk with symbol Low price	Pen with symbol High price	Pen with symbol Low price
N		314	297	256	358
Normal Parameters[a,b]	Mean	5.57	5.65	5.57	5.88
	Std. Deviation	1.176	1.141	1.359	1.135
Most extreme differences	Absolute	0.276	0.225	0.226	0.215
	Positive	0.192	0.152	0.146	0.162
	Negative	-0.276	-0.225	-0.226	-0.215
Kolmogorov-Smirnov Z		4.898	3.886	3.611	4.074
Asymp. Sig. (2-tailed)		0	0	0	0

a. Test distribution is Normal

b. Calculated from data

Table 6.18a General statistics for test of normality of data distribution for Study 4

Product Rating	N	Mean	Std. Deviation	Minimum	Maximum
Milk with symbol High Price	118	5.91	1.162	1	7
Milk with symbol Low Price	154	5.89	1.123	2	7
Movie with symbol High Price	86	4.86	1.816	1	7
Movie with symbol Low Price	136	5.07	1.702	1	7

Table 6.18b Test for normality of data distribution for Study 4: One-Sample Kolmogorov-Smirnov test

Statistics		Product Rating			
		Milk with symbol High price	Milk with symbol Low price	Film with symbol High price	Film with symbol Low price
N		118	154	86	136
Normal Parameters[a,b]	Mean	5.91	5.89	4.86	5.07
	Std. Deviation	1.162	1.123	1.816	1.702
Most extreme differences	Absolute	0.235	0.234	0.228	0.218
	Positive	0.173	0.161	0.119	0.129
	Negative	-0.235	-0.234	-0.228	-0.218
Kolmogorov-Smirnov Z		2.557	2.903	2.117	2.543
Asymp. Sig. (2-tailed)		0.000	0.000	0.000	0.000

a. Test distribution is Normal

b. Calculated from data

The results of the normality tests in the above tables show that datasets are mainly non-normal. However, non-normality is common with large samples. For instance, Micceri (1989) analysed 440 measures in psychology studies published between 1982 and 1984, each with samples size over 400, and found that all measures failed normality tests. According to Hair et al. (2010), normality violations can have significant effects in sample sizes of 50 or below, but may be negligible for samples beyond that. Therefore, non-normal variables in large samples, such as in this dissertation, may not be a concern.

Having discussed sample size adequacy and normality for all four studies, reliability and validity related issues are discussed in the next chapter's discussion, under study 4.

6.9 Summary of chapter 6

This chapter described this dissertation's research methodology. It highlighted the importance of using choice experiments for tapping consumer responses and the theoretical and statistical underpinnings of choice modelling. Adopting a triangulation approach, a qualitative survey first identified 10 potential symbols that are considered representative of the religion Islam and 10 products of high and low symbolic value each for Muslim consumers. These findings were validated by interviews with experts. The selected religious symbol was manipulated in different experiments with the different product packages to examine Muslim consumers' behaviour and attitude towards such use of symbols. Moreover, respondents' behaviour and attitude were measured towards use of local language and English language in the same settings. The behaviour was measured along a binary scale using the 'select one' method from Malaysia and Pakistan. The attitudinal measure was a seven-point scale to see the rating of respondents.

Religiosity was operationalised by adapting an established scale to measure two dimensions: intrinsic religiosity and extrinsic religiosity. Apart from the mentioned elicitation survey, four empirical studies were conducted to examine the role of symbols and language.

Psychometric analyses showed that the sample generally met sample size and tests for confounding variables. Having outlined the methodology, the next chapter reports the empirical results and hypotheses testing.

7. Results

This chapter reports the results of data analyses and testing of the conceptual model developed in chapter 5. As detailed earlier, data were collected using quasi-type experiments to suit the objectives and hypotheses of this thesis. An elicitation survey identified the most appropriate and representative symbols of Islam and the products of high and low symbolic value for Muslim consumers. The results of the elicitation survey were validated by a discussion with marketing scholars and practitioners. Next, as discussed in chapter 6, four large scale studies were conducted to examine the role of symbolic cues (symbols and verbal cues) used in product packaging and their influence on Muslim consumer responses. As mentioned, the hypotheses were tested using choice modelling, *t*-tests and structural equation modelling. Before hypotheses testing, the datasets were analysed for related assumptions. Similarly, the sample demographics and characteristics are presented in the previous chapter. Therefore, in this chapter, only a brief summary of the study is provided for a quick review prior to presenting the results of every study. The chapter starts with the results of study 1, followed by the remaining three studies.

7.1 Study 1

Study 1 is conducted to examine the use of symbols on product packages and their effects on Muslim consumers' choice and attitude towards product package with and without symbols. This is accomplished by conducting a quasi-experiment undertaken in Malaysia. The previous chapter provides reasoning and explanation of the choice of symbol and products for this study's experiment. In short, Malaysia is a Muslim consumer market where cultural symbols are of importance, particularly the Crescent. However, symbols may have a unique role with food products in that they help Muslim consumers identify food that they are permitted or not permitted to

consume (i.e. the notion of Halal). Consequently, the role of symbols in influencing Muslim consumers' choices of food products may be artificially skewed because Muslims look for the symbol when purchasing food products. This is similar to gluten-intolerant consumers identifying gluten-free signs on food products. Therefore, the study used one food product (milk) and one non-food product (a pen) with a manipulation of the presence or absence of symbols on their packages.
The purpose of first study is to test the following two hypotheses based upon research question 1(Chapter 1):

- H1: Muslim consumers choose products with religious symbols on product packaging over those without religious symbols.
- H2: Muslim consumers' rating of products with religious symbols on product packaging is higher than those without religious symbols.

7.2 Results: Study 1

7.2.1 Results of choice modelling

The theory behind choice modelling is explained in the previous chapter. However, this section briefly reviews RUT for interpreting the results. Given that the objective of the study was to explore preference of product package with a symbol or a product package without a symbol, the binary choice data were modelled using a random utility maximisation framework (Hensher, Rose & Greene. 2005; Louviere, Hensher & Swait 2000). The DCE approach involves a blend of economic theory, econometric methods and survey design theory. The approach is broadly consistent with the microeconomic theory of consumer behaviour, and it draws upon Lancaster's theory of consumer choice (Lancaster 1966, 1971) and RUT (Hanemann 1984; McFadden 1973). In discrete choice modelling, the utility function is composed of a deterministic component (V) and an unobservable or stochastic (random) component (e):

$$U_{in} = V_{in} + \varepsilon_{in}$$

where V_{in} is the observed component of the utility for individual (n) and alternative (i) and ε_{in} is the random or unobservable component for individual (n) and alternative (i).

The details are given in the previous chapter on data coding and analyses. In short, the sample size was adequate, as Hensher et al. (2005) recommended that a sample of 50 respondents per question provides needed variation to study the variables of interest.

Effects coding was used to analyse the binary choice data where, '1' represented the alternative being selected and '0' represented the alternative not selected.

The MNL model is used for modelling.

Thus, the model estimated utility in form:

$$V = \beta_0 + \beta_1 \text{ Symbol} + \beta_2 \text{ Price}$$

where V is utility, β_0 is constant coefficient and as denoted $\beta_{1\ \text{Symbol}}$ is the coefficient for symbol and $\beta_{2\ \text{Price}}$ is coefficient for price.

As depicted, this is a liner main effect utility function. The observed component of the utility function (V) is a product of the attribute levels between choice sets. The coefficients (partworth utilities) $\beta_1 - \beta_2$ and the constant β_0 are estimated in the model whereas ε is the error term. A positive sign with the coefficients denotes an increase in the utility relative to the constant (reference case). In this dataset, the utility for symbol is estimated. DCE modelling also produces an overall goodness-of-fit test. As mentioned, the model was specified as an MNL model by using MLE, Log likelihood and other statistics are presented in Table 7.1. Table 7.1 is the result output format of the NLogit. The software NLogit (LimDep), used to analyse data, is explained in previous chapter.

Table 7.1 Results from the Logit model using NLogit/LimDep for study 1

Discrete Choice (multinomial logit) mode, Maximum Likelihood Estimates				
Dependent variable	Choice	Info. criterion: AIC	.98953	
Number of observations	357	Finite sample: AIC	.98985	
Iterations completed	6	Info. criterion: BIC	1.03298	
Log Likelihood function	-172.6312	Info. criterion: HQIC	1.00681	
Number of parameters	4	R-Squared	.12416	
Log Likelihood constants only	-197.1036	R-Squared adjusted	.11424	
Choice	**Coefficient**	**Std. Error**	**b/Std.Error**	**P[|Z|>z]**
S1	0.92940722	0.11361502	8.18	0.000
H1	-0.20922643	0.11361502	-1.842	0.066
S2	0.41705791	0.09162109	4.552	0.000
H2	-0.43880047	0.09162109	-4.789	0.000

Similarly, the results are generated after following the steps mentioned in the data analyses section. DCE modelling produces an overall goodness-of-fit test statistics. When specifying a MNL model and using MLE specification, a log likelihood ratio test (LLR) is most commonly used to test for fit. This test is similar to an overall *F*-test in an ordinary least square (OLS) regression, and produces a fit statistic in a similar vein. Though the tests are similar, the statistic is interpreted differently. The DCE LLR test produces an *R-squared*. However, as the OLS is estimated as a linear function and the MNL-MLE is logistic in nature, they are not directly equivalent. In choice modelling, *R-squared* in the range of 0.2 to 0.4 is indicative of good fit. The pioneering work in the field of choice modelling has determined this is equivalent to a range of 0.7 to 0.9 in terms of a standard regression *R-squared* (Louviere et al., 2000). However, heavy reliance on *R-squared* for goodness-of-fit may also result in misinterpretations (Greene 2007).

The results show utility coefficient (β) estimates for each of the attribute levels in the DCE. These coefficients are arbitrarily defined by the data that are generated from the experiment and give a relative measure of the preference for each of the levels of the attribute represented in the experiment. Each utility coefficient is associated with an estimated *p*-value, to approximate its statistical significance. This takes the same form as the *p*-values presented in other models, where the

significance alpha level of 0.05 equates to a five per cent chance of the estimate being different from zero by as much as it is, or more just by chance, given that the true value is zero. It specifies whether, statistically, the coefficient can be used inferentially.

The coefficients in Table 7.1 show the partworth utilities associated with changes in each of the attribute levels (compared to the reference case), from -1 to 1. The partworth utility for product package of milk is .93 (with a positive sign) and it is significant at .001. It shows an increase in the utility of the use of symbols on product packages, as compared to no symbol on product packages. On average, respondents preferred the product package with the religious symbol to the product package without the religious symbol. Interestingly, the part-utility for price is -.21 (with a negative sign) and not significant at .05 level. The negative sign depicts that as price of the product increases, there is a decrease in utility of the product; however, the weight importance is not statistically significant. This is in line with the economic theory of consumer behaviour. The price is also useful in calculating consumers' willingness to pay, which is discussed later after study 2. Likewise, for the pen, the coefficient for a symbol is positive and coefficient for price is negative, which can be interpreted accordingly. Therefore, the increase in utility of the products with religious symbols on their packages provides support for hypothesis 1.

7.2.2 Results of Binomial test

In order to further validate and test hypothesis 1 (Muslim consumers choose products with religious symbols on product packaging over those without religious symbols), a binomial test was performed. Binomial tests are used in consumer behaviour literature to test hypotheses and examine if the occurrence or non-occurrence is by chance (e.g., Bottomley, Paul & Holden 2001; Simmons & Schindler 2003). The binomial test is useful for determining if the proportion of people in one of two categories is different from a specified amount. In this study, it could be determined if the proportion of people who selected a product package with a symbol is significantly different from the proportion of people who selected a product package without a symbol. The frequency percentage of the respondents who selected the package with a symbol was compared to the frequency percentage of the respondents who selected the package without a symbol. Table 7.2 shows the

results. The frequency percentage of individuals who selected a product package with a symbol was higher than the frequency percentage of individuals who selected a product package without a symbol for both products (milk and a pen) and with both price levels (low and high). Therefore, H1 was supported.

Table 7.2 Results of Binomial test and one-sample t-test: Malaysian sample

Products	Price levels	Choice	Binomial test		One sample *t*-test						
			Frequency %age	p-value	Mean (WtS)	Mean (WS)	Mean diff:	Std. Dev	t-value	df	p-value
Milk	Low	WS versus WtS	78 vs 28	<.001	5.24	6.22	0.984	1.001	8.564	75	0.000
	High	WS versus WtS	76 vs 8	<.001	4.89	6.01	1.124	1.061	9.053	72	0.000
Pen	Low	WS versus WtS	72 vs 48	<.001	5.73	6.12	0.393	0.985	3.411	72	0.001
	High	WS versus WtS	46 vs 13	<.001	5.23	5.87	0.64	1.024	4.235	45	0.000

Note: WS=With Symbol; WtS=Without Symbol

To test hypothesis 2 (Muslim consumers' rating of products with religious symbols on product packaging is higher than those without religious symbols), the mean of rating score for products without symbols was used as a test score and it was compared to the mean rating score of product packaging with symbols by performing one-sample *t*-test. There was a significant difference in ratings for both products at both price levels, (see Table 7.2). Thus, H2 was also supported.

The support for both of the hypotheses establishes Muslim consumers' choice for products with religious symbols on product packaging. As discussed earlier, Malaysia has a diversified population and legislation mandates that producers/manufacturers to use the Halal symbol on (food) product packages that are suitable for Muslim consumption. In other words, in Malaysia, by default the (food) products are improper for Muslim consumers if the products do not have the Halal sign or logo on their packaging. Therefore, Muslims may be more attentive to the signs on product packages in Malaysia as compared to other countries, for example in Pakistan. This specific legislation of Malaysia limits the ability of this study to be generalised to other Muslim consumers around the globe.

Pakistan, also a majority Muslim country, has different legislation regarding products sold at the retail outlets. Pakistani legislation mandates that all products for Muslim consumption must be Halal. Hence, food products in Pakistan may or may not carry any religious or Halal signs. This characteristic of the Pakistani market may help accentuate the pertinence of religious symbols on packaging. Therefore, in order to better understand the role of religious symbols and generalise the effects of religious on Muslim consumers' choice of products, study 2 was conducted in Pakistan.

7.3 Study 2

To further increase the generalisability of the findings of the first study, and considering the different legislation in Malaysia, study 2 examined the use and influence of symbols in Pakistan and the results compared to the findings in study 1. ***Study 2*** used same procedure, settings and data analysis techniques. As mentioned, one objective of study 2 was to generalise the results of study 1, therefore, first the hypotheses of study 1, H1a and H2a, were tested with this sample. The second objective is to answer research question 2, posing following two hypotheses:

- H3: Compared to Muslim consumers from non-legislated countries, Muslim consumers from Halal legislated countries are more likely to choose products with symbol on their packaging.
- H4: Compared to Muslim consumers from non-legislated countries, Muslim consumers from Halal legislated countries rate products with symbol on their packaging higher.

The next section sheds light on the results of replication of the first study 1 (H1 and H2) with a different sample first, and then hypotheses H3 and H4 are tested.

7.4 Results: Study 2

In order to validate the results, study 1 was replicated by using the same procedure with a different sample. Therefore, to test hypothesis H1 (Muslims consumers choose products with religious symbols on product packaging over those without religious symbols), the results are generated by repeating same steps as in study 1. For example, the same data coding and MNL was used to specify the model.

Therefore, LLR and other goodness-of-fit statistics produced in this study (see Table 7.3) can be interpreted similarly, as these are elaborated in study 1. The utility partworths given in Table 7.3 also highlight the importance of symbols on product packaging for this sample.

Table 7.3 Results from the Logit model using NLogit/LimDep for study 1

Discrete choice (multinomial logit) mode, Maximum Likelihood Estimates				
Dependent variable	Choice	Info. Criterion: AIC	1.24413	
Number of observations	948	Finite Sample: AIC	1.24418	
Iterations completed	5	Info. Criterion: BIC	1.26461	
Log Likelihood function	-585.7186	Info. Criterion: HQIC	1.25194	
Number of parameters	4	R-Squared	.02933	
Log Likelihood constants only	-603.4154	R-Squared Adjusted	.02521	
Choice	**Coefficient**	**Std. Error**	**b/Std.Error**	**P[|Z|>z]**
S1	0.38610979	0.05068084	7.618	0.0000
H1	-0.21496669	0.05068084	-4.242	0.0000
S2	0.33709183	0.04965042	6.789	0.0000
H2	-0.19812888	0.04965042	-3.990	0.0001

For example, the utility partworth (β) for religious symbols for product 1 (milk) is .39 and it is significant at .001 level. Again, on average, the respondents preferred the use of symbols on product packages. The utility partworth of price for this product is -.21, again negative, but significant for this sample. Likewise, the utility partworth of the symbol for the second product (pen) is .34, which is also significant at .001 level. The utility partworth for price for this product is -.20, which is significant at .001 level. The results of choice modelling show support for H1 for this sample as well.

In order to reaffirm hypothesis 1, again, a binomial test was performed. The frequency percentage of the respondents who selected the package with a symbol was compared to the frequency percentage of the respondents who selected the package without a symbol. Table 7.4 shows the results. The frequency percentage of individuals who selected the product package with a symbol was higher than frequency percentage of individuals who selected the package without a symbol. Therefore, H1 was supported for this sample by using a binomial test as well.

Table 7.4 Results of Binomial test and one-sample *t*-test: Pakistani sample

Products	Price levels	Choice	Binomial test		One sample *t*-tests						
			Frequency %age	p-value	Mean (WtS)	Mean (WS)	Mean diff:	Std. Dev	t-value	df	p-value
Milk	Low	WS versus WtS	75 vs 40	<.001	5.54	5.63	0.09	1.101	1.098	180	0.274
	High	WS versus WtS	56 vs 23	<.001	5.39	5.46	0.073	1.31	0.652	135	0.516
Pen	Low	WS versus WtS	72 vs 43	<.001	5.63	5.77	0.145	1.201	1.583	172	0.115
	High	WS versus WtS	56 vs 25	<.001	5.31	5.44	0.134	1.539	1.015	134	0.312

Note:WS=With Symbol; WtS=Without Symbol

To test H2 (Muslim consumers' rating for products with religious symbols on product packaging is higher than those without religious symbols) the mean of rating score for products without symbols was used as a test score and it was compared to the mean rating score of product packaging with symbols by performing one-sample *t*-test. The results (see Table 7.4) show while the ratings for the products with symbols on their package are consistently higher than the rating for product packages without symbols, the differences are not statistically significant. Table 7.4 shows mean values and their relevant significance levels. Thus, H2 was not supported. A possible explanation for this discrepancy is provided in the discussion section.

The results of H1 for study 1 and study 2, the behavioural response as tapped by choice of the Muslims, is consistent in both of these studies. Whereas the results of H2 show support in study 1 and it was not statistically significant in study 2. This phenomenon is elaborated and discussed in chapter 8.

In order to test H3 (the effects of symbols on product selection are stronger with Muslim consumers from Halal-symbol legislated countries than with those from non-legislated countries), first based on the choice modelling results, the utility partworths of product packages with symbols in Malaysia (study 1) and utility partworth of product packages with symbols in Pakistan (study 2) were compared for both of the product categories. As shown in Table 7.5, the utility partwoths of the Malaysian sample are greater than utility partworths of the Pakistani sample for both of the products. As the same coding and modelling methods are used for both of the samples, in a way, results support H2. Further, the results are confirmed in alter section in the willingness to pay analyses.

Table 7.5 Utility partworth comparison

Products	Utility partworths	
	Malaysia	Pakistan
Product 1	.93	.39
Product 2	.42	.34

All values are significant at .001 level.

Again, to test H3 and for a comparison between the Pakistani and Malaysian samples, a binomial test was performed to compare the proportion of respondents who selected the product packaging with symbols in Malaysia (study 1) with those who selected product packaging with symbols in Pakistan (study 2). The results show that there was no significant difference for both products when the price was low (milk 78 per cent for Malaysia and 75 per cent for Pakistan; for the pen, both samples were 72 per cent). Although the frequency percentage of the Malaysian sample is higher (by three per cent) than Pakistani sample, it is not statistically significant. However, there was a significant difference between two samples when the price was high. With high price, the frequency percentage of Malaysian respondents was significantly greater (76 per cent) than Pakistani respondents (56 per cent) for milk. On the other hand, the frequency percentage of Pakistani respondents was significantly greater (56 per cent) than their Malaysian counterparts (46 per cent) for the pen. In these analyses, overall the frequency percentage of the Malaysian sample was higher for milk (food product category) and not for the pen (non-food category) than the Pakistani sample. Therefore, H3 was partially supported.

Finally, to test H4, an independent-samples *t*-test was performed for each product (with high and low prices) to compare the ratings of the Malaysian individuals who selected the product package with the symbol and the Pakistani individuals who selected the product packaging with the symbol. The results showed that there was a significant difference in the rating of Pakistani individuals who selected the product package with the symbol ($M = 5.63$, $SD = 1.10$) and the Malaysian individuals who selected the product packaging with the symbol ($M = 6.22$, $SD = 1.10$), $t(255) = 4.05$, $p < .001$) for milk when the price was low. The results also showed that there was a significant difference in the rating of Pakistani

individuals who selected the product package with the symbol (M = 5.46, SD = 1.31) and the Malaysian individuals who selected the product packaging with the symbol (M = 6.01, SD = 1.06), $t(207) = 3.086$, p = .002) for milk when the price was high. Similarly, for the pen, there was a significant difference in the rating of Pakistani individuals who selected the product package with the symbol (M = 5.77, SD = 1.20) and the Malaysian individuals who selected the product packaging with the symbol (M = 6.12, SD = .985), t (244) = 2.188, p = .030) for when the price was low. There was also a significant difference in the rating of Pakistani individuals who selected the product package with the symbol (M = 5.44, SD = 1.54) and the Malaysian individuals who selected the product packaging with the symbol (M = 5.87, SD = 1.02), $t(117.49) = 2.116$, p = .036) for pen when the price was high. However, this is, when equal variance was not assumed, as Levene's test showed F = 4.735 was significant at .031. Therefore, H4 was supported.

In summary, the results so far show the importance of symbols for Muslim consumers. These studies establish that Muslim consumers not only prefer a product package with a symbol to a product package without a symbol, but also show a positive attitude towards this packaging attribute. As discussed previously, the DCE design and unique approach used in this thesis allows for determining the consumer willingness to pay. Therefore, the next section discusses the consumer sensitivity to the price of a product and how much consumers are willing to pay for a product package with a symbol.

7.5 Consumer willingness to pay for the presence of a symbol on product packaging

Using DCE modelling, the results of H3 showed that utility partworths of Malaysian respondents are greater for product packaging with symbols than the utility partworths of Pakistani respondents. In order to further analyse the importance of the symbol on product packaging, the willingness to pay analyses serves two main objectives. The first objective is to analyse the monetary value of utility that consumers derive from the addition of a symbol on product package. The second objective is to examine whether the greater preference by Malaysian respondents results in paying more money for such products.

Willingness to pay (WTP) analysis provides an estimate about how much consumers can pay for a product attribute. The WTP concept is derived from welfare economics (e.g., Louviere, Hensher & Swait 2000). Welfare economics is defined as:

> the systematic analysis of the social desirability of any set of arrangements for example, a state of the world or allocation of resources, solely in terms of the utility obtained by individuals. (Morris, Devlin & Parkin 2007, p. 210).

By aggregating the preference of individuals in a society, this provides an understanding of the overall preference of the society. For example, it can use the logical and individual ranking to sum up a consistent choice/ranking of different alternatives and decide which alternative to implement or adopt in society. In the same analogy, consumer demand for different alternatives with different attributes can be predicted. The basic element of welfare economics that is related to WTP is that every individual maximises utility. This is an important measurement and can be helpful in cost and benefit analysis as well. WTP, in fact, provides a monetary value of an attribute. WTP reflects opportunity cost, the 'highest valued opportunity forgone' (Getzen 2004, p. 37). Research, however, indicates that designing the instruments that accurately reflect consumers' WTP is difficult and complex. While there are different methods to elicit and measure WTP, DCEs offer a number of advantages over others.

A section on experimental design detailed the advantages of using the SP method over the RP method for a study like this. An assumption for SP is that:

> The values that people state are really those that underlie their choices in the everyday world, and that the choices that they make within the survey are those that they would make if they really faced with the alternatives offered. (Morris, Devlin & Parkin 2007, p. 267)

In DCEs, different combinations of attributes in different alternatives are assigned to respondents and respondents receive complete descriptions of all attributes. They can choose the alternative that provides the greatest utility. Ryan et al. (2001, p. i55) explain that for each choice set (individuals) they are asked to choose their preferred scenario. Response data are modelled within a benefit (or satisfaction) function, which provides information on whether the given characteristics are important; the relative importance of characteristics; the rate at which individuals are willing to trade between characteristics; and overall benefit scores for alternative scenarios.

Price of the product can also be manipulated in the SP method. From a DCE perspective, WTP can be defined as the marginal rate of trade-off of particular attributes/levels for different price levels. Louverie and Islam (2008, p. 609) explain the calculation of WTP as:

> … for a utility function common to discrete choice models like $U_i=\beta0+\beta1$ (attribute 1)$-\beta2$(price), WTP can be calculated as the difference between level 1 and level 2 of attribute 1 is the ratio $\beta1/\beta2$. That is, units of $\beta1$ are utility per level, and units of $\beta2$ are utility per dollar, with the ratio being in units of utility difference per dollar, or the dollar value of the difference in attribute level utility.

where U_i= overall utility function
β_0 = Constant coefficient
β_1 = Utility partworth for attribute 1
β_2 = Utility partworth for price

In this study, the use of religious symbols was manipulated along with different price levels of the product. The two price levels, high price and low price, resembled the actual price range in the relevant markets. For example, price for milk in Malaysia was set high at MYR 6.9/ litre (approximate US$2.10), whereas the low price was MYR 6.3/litre. Therefore, in order to calculate WTP for milk, first the difference in two price levels is calculated, followed by calculating the monetary value of one unit of utility. The difference or change in price can be calculated by subtracting the lower price (MYR 6.3) from the higher price (MYR 6.9). Thus, the change in price is MYR .30 for milk for the Malaysian sample, whereas the results of study 1 showed β_2 ($\beta_{2\ price}$) as -.21. Therefore, one unit of utility is, change in price /β_2 i.e. .30/ .21= 1.43 MYR. Finally, one unit of utility is multiplied with β_1 to calculate WTP. Again, β_1 for milk in study 1 is .93. Therefore, .93 utility is worth: .93*1.43=1.33 MYR. This is the WTP for milk for the Malaysian sample.

In other words:

High price = 6.9
Low Price = 6.3
Change in price = High Price – Low Price
Change in Price = 6.9 – 6.3
= 0.30 MYR

Earlier, $\beta_{2\ price}$ for the Malaysian sample was calculated (study 1):

$\beta_{2\ price}$ = -.21

So, one unit of utility is = change in price/ $\beta_{2\ price}$

= .30/.21 = 1.43

Since,

$\beta_{1\ Symbol}$ = .93

Therefore, .93 utility is worth

= .93 * 1.43

= 1.33 MYR

It shows that overall, Malaysian consumers are willing to pay an additional 1.33 MYR for the use of symbols on product packages of one litre of milk.

Similarly, WTP for the pen for the Malaysian sample can be calculated as follows:

High price = 10.8

Low Price = 9.3

Change in price = High Price – Low Price

Change in Price = 10.8 – 9.3

= 1.5 MYR

Earlier, the $\beta_{2\ price}$ for the Malaysian sample was calculated (study 1):

$\beta_{2\ price}$ = -.44

So one unit of utility is = change in price/ $\beta_{2\ price}$

= 1.5/.44 = 3.41

Since,

$\beta_{1\ Symbol}$ = .42

Therefore, .42 utility is worth

= .42 * 3.41

= 1.43 MYR

It shows that overall, Malaysian consumers are willing to pay an additional 1.43 MYR for the use of religious symbols on product packages of one litre of milk.

The same steps are followed to calculate WTP for the Pakistani sample for both of the products. With this sample, the high price for milk was set at Pak Rupees 88.15/ litre (approximate US$1), whereas the low price was Pak Rupees 80.85/litre.

Therefore, WTP for Pakistani consumers and milk products can be calculated as follows:

High price = 88.15

Low Price = 80.85

Change in price = High Price – Low Price

Change in Price = 88.15 – 80.85

= 7.30 Pak rupees

Earlier, the $\beta_{2\ price}$ for the Pakistani sample was calculated (study 2):

$\beta_{2\ price}$ = -.21

So one unit of utility is = change in price/ $\beta_{2\ price}$

= 7.30/.21 = 34.76

Since,

$\beta_{1\ Symbol}$ = .39

Therefore, .39 utility is worth

= .39 * 34.76

= **13.56 Pak Rupees**

For product 2, the pen WTP can be calculated as follows:

High price = 115.50 Pak rupees

Low Price = 105.95 Pak rupees

Change in price = High Price – Low Price

Change in Price = 115.50 – 105.95

= 9.55 Pak rupees

Earlier, the $\beta_{2\ price}$ for the Pakistani sample was calculated (study 2):

$\beta_{2\ price}$ = -.20

So one unit of utility is = change in price/ $\beta_{2\ price}$

= 9.55/.20 = 47.75

Since,

$\beta_{1\ Symbol}$ = .34

Therefore, .34 utility is worth

= .34 * 47.75

= **16.24 Pak Rupees**

Table 7.6 Summary of the consumer willingness to pay

Sample	Product	Willingness to pay for symbol	Willingness to pay for symbol in US $*
Malaysia	Milk	1.33 MYR/litre	.40
Malaysia	Pen	1.43 MYR	.43
Pakistan	Milk	13.56 Pak Rs.	.16
Pakistan	Pen	16.24 Pak Rs.	.19

*Average exchange rates of last 10 years (2005–2014) where 1 US$ = 3.35 MYR, 1 US$ = 84.11 Pak Rs. (http://www.ozforex.com.au/forex-tools/historical-rate-tools/yearly-average-rates)

The results of these two studies show the importance of symbols and present some interesting findings for two Muslim markets. As symbols are important for Muslim consumers, verbal cues in the form of local language are a sign of culture and heritage for Muslim consumers. Both study 1 and study 2 are conducted in English language and the respondents viewed product packages in English. However, as detailed in the literature review, current research shows mixed and inconclusive results about the influence of languages on consumer responses. Similarly, researchers have found Muslim consumers showed positive attitudes towards their local language and perceived English as a western sign and a threat to their own heritage. Therefore, there are many examples of the products packages in the local language as well as in English language in these markets. Consequently, the use of language in product packaging is an important decision for marketers operating in Muslim markets. Therefore, the following study (study 3) compares and investigates the responses to the use of local and English language on product packaging.

7.6 Study 3

As the presence of symbols influences the choice of respondents in both countries, it is useful to examine the use and influence of verbal cues. Therefore, study 3 examines the influence of use of language on product packaging on consumer choice and attitude. Study 3 was conducted to answer research question 3, posing the following two hypotheses:

- H5: For bilingual Muslim consumers, the influence on choice of local language on product packages does not significantly differ from that of English language on product packages.
- H6: For bilingual Muslims consumers, the rating of the product package in local language does not significantly differ from that of English language.

Results: Study 3

The experiment, measurement and procedures similar to those in study 1 and study 2 were employed in this study, but using two local languages: Malay in Malaysia and Urdu in Pakistan, along with English. Both questionnaires were identical except for language. First, the hypothesis H5 is tested with respondents from Malaysia followed by respondents from Pakistan. Using the same choice modelling technique, the results are presented for respondents who viewed the product package in English language (see Table 7.7) and the respondents who viewed product package in Malay language (see Table 7.8). The goodness-of-fit statistics shown in these tables can be interpreted as these considerations are discussed in study 1. For comparison purposes between responses to two languages, results are generated for a combined dataset (Table 7.9).

Table 7.7 Results from the Logit model using NLogit/LimDep for study 3: Malaysian respondents who viewed package in English language

Discrete choice (multinomial logit) mode, Maximum Likelihood Estimates				
Dependent variable	Choice	Info. criterion: AIC	.98953	
Number of observations	357	Finite sample: AIC	.98985	
Iterations completed	6	Info. criterion: BIC	1.03298	
Log likelihood function	-172.6312	Info. criterion: HQIC	1.00681	
Number of parameters	4	R-Squared	.12416	
Log likelihood constants only	-197.1036	R-Squared adjusted	.11424	
Choice	**Coefficient**	**Std. Error**	**b/Std.Error**	**P[|Z|>z]**
S1	0.92940722	0.11361502	8.18	0.000
H1	-0.20922643	0.11361502	-1.842	0.0655
S2	0.41705791	0.09162109	4.552	0.000
H2	-0.43880047	0.09162109	-4.789	0.000

Table 7.8 Results from the Logit model using NLogit/LimDep for study 3: Malaysian respondents who viewed package in Malay language

Discrete choice (multinomial logit) mode, Maximum Likelihood Estimates				
Dependent variable	Choice	Info. criterion: AIC	.94429	
Number of observations	376	Finite sample: AIC	.94458	
Iterations completed	7	Info. criterion: BIC	.98610	
Log likelihood function	-173.5271	Info. criterion: HQIC	.96089	
Number of parameters	4	R-Squared	.13117	
Log likelihood constants only	-199.7248	R-Squared adjusted	.12183	
Choice	**Coefficient**	**Std. Error**	**b/Std.Error**	**P[|Z|>z]**
S1	0.95513932	0.12813235	7.454	0.0000
H1	-0.47881013	0.12813235	-3.737	0.0002
S2	0.55784312	0.09591797	5.816	0.0000
H2	-0.45861765	0.09591797	-4.781	0.0000

Prior to analysing the interaction effect of language, LLR test is used for model comparison. The LLR test measures whether the models for separate datasets fit better than one model for a combined dataset. When the model is fitted to two datasets separately, the log likelihood is -172.6312 (Table 7.7) for respondents who viewed the package in English and the log likelihood is -173.5271 (Table 7.8) for respondents who viewed the package in Malay. These two log likelihoods are added to get the total:

= -172.6312 + -173.5271

= -346.1583

For comparison, when one model is fitted to the datasets combined (leading to more rows and the same number of columns in the data file) the log likelihood is -348.0320 (Table 7.9).

Table 7.9 Results from the Logit model using NLogit/LimDep for study 3: combined dataset from Malaysia

Discrete choice (multinomial logit) mode, Maximum Likelihood Estimates			
Dependent variable	Choice	Info. criterion: AIC	.96325
Number of observations	733	Finite sample: AIC	.96336
Iterations completed	6	Info. criterion: BIC	.99461
Log likelihood function	-348.0320	Info. criterion: HQIC	.97535
Number of parameters	5	R-Squared	.12331
Log likelihood constants only	-396.9856	R-Squared adjusted	.11729

Choice	**Coefficient**	**Std. Error**	**b/Std.Error**	**P[|Z|>z]**
S1	.93425754	.08403118	11.118	.000
H1	-.34355922	.08374176	-4.103	.000
S2	.48708556	.06612813	7.366	.000
H2	-.44881552	.06612813	-6.787	.000
M	-.05171022	.07370898	-.702	.483

As mentioned, the LLR test measures whether the models for separate datasets fit significantly better than one model for the combined dataset.

The LLR test statistic is:

LLR = -2*(the difference in the likelihoods)

By putting the values:

= -2*(-348.0320 – -346.1583)

= -2* (-1.8737)

= 3.7474

LLR is Chi-Square distributed. The degree of freedom is three. The models for the separate datasets have eight parameters in total (four coefficients for each of the two models), whereas the model for the combined dataset has only five parameters (the five coefficients). The difference in the number of parameters, three, is the degree of freedom.

Using the Chi Squared Test of a distribution (CHIDIST) function in Excel, it gives p =.29. As p > 0.05, the two models for separate datasets do not fit

significantly better than one model for the combined dataset. It shows there are no differences in the two datasets. Likewise, the coefficient for language interaction in the combined dataset was calculated. As shown in Table 7.8, the coefficient -.052 for language interaction is not significant at .05 level. It means there are no differential effects of language, as depicted in the LLR test. On average, there is no significant difference in the responses to product packaging in different languages. Therefore, H5 is supported for the Malaysian sample.

Likewise, in order to test H3a for the Pakistani sample, first separate results are presented for respondents who viewed packaging in English (Table 7.10) and respondents who viewed packaging in Urdu (Table 7.11). Later, data were combined to model the interaction effect of language on consumer choice (Table 7.12).

Table 7.10 Results from the Logit model using NLogit/LimDep for study 3; Pakistani respondents who viewed package in English language

Discrete choice (multinomial logit) mode, Maximum Likelihood Estimates				
Dependent variable	Choice	Info. criterion: AIC	1.24413	
Number of observations	948	Finite sample: AIC	1.24418	
Iterations completed	5	Info. criterion: BIC	1.26461	
Log likelihood function	-585.7186	Info. criterion: HQIC	1.25194	
Number of parameters	4	R-Squared	.02933	
Log likelihood constants only	-603.4154	R-Squared adjusted	.02521	
Choice	**Coefficient**	**Std. Error**	**b/Std.Error**	**P[|Z|>z]**
S1	.38610979	.05068084	7.618	.0000
H1	-.21496669	.05068084	-4.242	.0000
S2	.33709183	.04965042	6.789	.0000
H2	-.19812888	.04965042	-3.990	.0001

As mentioned, the LLR test measures whether the models for separate datasets fit better than one model for a combined dataset. With this sample, when the model is fitted to two datasets separately, log likelihood is -585.7186 (Table 7.10) for respondents who viewed the package in English; log likelihood is -524.4103 (Table 7.11) for respondents who viewed the package in Urdu. These two log likelihoods are added to get the total:

= -585.7186 + -524.4103

= -1110.1289

Table 7.11 Results from the Logit model using NLogit/LimDep for study 3: Pakistani respondents who viewed package in Urdu language

Discrete choice (multinomial logit) mode, Maximum Likelihood Estimates			
Dependent variable	Choice	Info. criterion: AIC	1.17555
Number of observations	899	Finite sample: AIC	1.17560
Iterations completed	5	Info. criterion: BIC	1.19691
Log likelihood function	-524.4103	Info. criterion: HQIC	1.18371
Number of parameters	4	R-Squared	.07710
Log likelihood constants only	-568.2178	R-Squared adjusted	.07297

Choice	**Coefficient**	**Std. Error**	**b/Std.Error**	**P[|Z|>z]**
S1	.40922690	.05489305	7.455	.0000
H1	.36455435	.05489305	6.641	.0000
S2	.40283073	.05454586	7.385	.0000
H2	-.32845810	.05454586	-6.022	.0000

Again, for comparison, when one model is fitted to the datasets combined, the log likelihood is -1143.809 (table 7.12).

The LLR test statistic is:

LLR = -2*(the difference in the likelihoods)

By putting the values:

= -2*(-1143.809– -1110.1289)

= -2* (-33.68)

= 67.36

LLR is Chi-Square distributed. The degree of freedom is three. The models for the separate datasets have eight parameters in total (four coefficients for each of the two models), whereas the model for the combined dataset has only five parameters (the five coefficients). The difference in the number of parameters, three, is the degree of freedom.

Using the CHIDIST function in Excel, it gives $p < .005$ (very small). As in this case, $p < 0.05$, the two models for separate datasets fit significantly better than one model for the combined dataset. It shows there are differences in the two datasets. However, the coefficient for language interaction in the combined dataset was calculated. As shown in Table 7.12, the coefficient is -.003 for language interaction and it is not significant at .05 level. It means there are no differential

effects of language. The difference in the LLR test shows there are some moderating effects, but as evident in the interaction test, these differences cannot be attributed to language. On average, there is no significant difference in the responses to product packaging in different languages. Therefore, H5 is supported for the Pakistani sample as well.

Table 7.12 Results from the Logit model using NLogit/LimDep for study 3: combined dataset from Pakistan

Discrete choice (multinomial logit) mode, Maximum Likelihood Estimates				
Dependent variable	Choice	Info. criterion: AIC	1.24397	
Number of observations	1847	Finite sample: AIC	1.24399	
Iterations completed	5	Info. criterion: BIC	1.25892	
Log likelihood function	-1143.809	Info. criterion:HQIC	1.24948	
Number of parameters	5	R-Squared	.02378	
Log likelihood constants only	-1171.6747	R-Squared adjusted	.02113	
Choice	**Coefficient**	**Std. Error**	**b/Std.Error**	**P[|Z|>z]**
S1	.36888524	.03520421	10.478	.0000
H1	.06088576	.03519690	1.730	.0837
S2	.36575112	.03656124	10.004	.0000
H2	-.25850421	.03656124	-7.070	.0000
M	-.00318855	.03517603	-.091	.9278

Similarly, H5 was first tested with the Malaysian sample and later with the Pakistani sample.

To test H6 (bilingual Muslims consumers rate the product package in local language similar to the product packaging in English), an independent-samples *t*-test was performed for each product (with high and low price) to compare the ratings of the Malaysian individuals who viewed the package in English to the individuals who viewed the package in Malay.

As shown in Table 7.13, there were no significant differences in rating scores of individuals who viewed product package in English and the individuals who viewed product package in the Malay language for both products at both price levels. Table 7.13 shows mean values and other statistics. Thus, H6 was supported for the Malaysian sample.

Table 7.13 Results of Independent sample *t*-test: Malaysian sample

Products	Price levels	An Independent sample *t*-test							
		Mean (English)	Std. Dev	Mean (Malay)	Std. Dev	Mean Diff:	*t*-value	df	p-value
Milk	Low	6.21	1.004	6.15	0.796	0.06	0.428	163	0.669
	High	6.03	1.06	5.9	0.894	0.128	0.781	141	0.436
Pen	Low	6.12	0.985	6.07	1.015	0.052	0.324	155	0.747
	High	5.83	1.049	6.08	1.093	-0.249	-1.147	96	0.254

Similarly, to test H6, an independent-samples *t*-test was performed for each product (with high and low price) to compare the ratings of the Pakistani individuals who selected the product package with symbols and have viewed the package in Urdu language to the individuals who selected product packages with symbols and have viewed the package in English. The results presented in Table 7.14 show there is no significance difference between the rating of Pakistani individuals who viewed package in English and who viewed package in Urdu for both product and at both price levels. Thus, H6 was supported for the Pakistani sample as well.

Table 7.14 Results of Independent sample *t*-test: Pakistani sample

Products	Price levels	An independent sample *t*-test							
		Mean (English)	Std. Dev	Mean (Urdu)	Std. Dev	Mean Diff:	*t*-value	df	p-value
Milk	Low	5.63	1.101	5.69	1.204	-0.06	-0.44	295	0.66
	High	5.46	1.31	5.65	1.059	-0.188	-1.37	255	0.436
Pen	Low	5.77	1.201	5.98	1.063	-0.204	-1.702	356	0.09
	High	5.44	1.539	5.71	1.114	-0.266	-1.597	244	0.111

Note: Equal variance not assumed for milk with high price as Levene's test showed F=3.923, p=.049
Equal variance not assumed for pen with high price as Levene's test showed F= 8.992, p=.003

These three studies highlight the importance of religious symbols for Muslim consumers. However, the results for verbal cues (use of local language or English language) on product packages show that overall there was no significant difference in consumer choice or attitudes. Overall, Muslim consumers show positive responses towards the use of religious symbols. This can be attributed to their religious affiliation. Being the followers of Islam, Muslim consumers' preference for a product package with a religious symbol indicates the positive influence of religion on their choices.

Having established the relationship between the use of religious symbols and consumer choice and rating, it is possible to examine another concept—religiosity—often referred as level of religiousness and mentioned in consumer behaviour literature. Religiosity and consumer behaviour research suggests differences in the behaviour and choice between individuals with higher religiosity (strong commitment) and individuals with low religiosity (less commitment) . The three previous studies recruited student samples from Malaysia and Pakistan. Although researchers declare such samples as true representatives of the general population, a convenience sample was recruited from Pakistan. In the next study, a quasi-experimental approach was used to investigate whether the religiosity of the consumers influences their ratings of product packages with religious symbols. The study examines the differential effect of intrinsic and extrinsic religiosity for high symbolic value products and low symbolic value products respectively.

7.7 Study 4

Finally, study 4 takes into account the influence of religiosity on consumers' ratings for product packages of high symbolic value products as well as low symbolic value products. This study involved a consumer sample from Pakistan and religiosity is measured by two dimensions: intrinsic religiosity and extrinsic religiosity. The data are analysed by structural equation modelling and results are presented. The previous chapter elaborated on general data analyses and various assumption tests. The next section details the mentioned four studies and their results.

Study 4 was conducted to investigate research question 4:

> **RQ4: What are the effects of the interactions of (symbolic Islamic values x consumer religiosity) on the influence of religious cues?**

The hypotheses arising from RQ4 are that among Muslim consumers:

- H7a: For high symbolic value products, intrinsic religiosity determines the rating of the product with a symbol more than extrinsic religiosity does.
- H7b: For low symbolic value products, extrinsic religiosity determines the rating of the product with symbols more than intrinsic religiosity does.

In this study, along with the package of high symbolic value product (milk), a package of low symbolic value product (a film) was also used. Both products

contained religious symbols on their packaging. As elaborated in the literature review and conceptual development, religiosity is a two-dimension construct, with intrinsic religiosity and extrinsic religiosity factors. Five items adopted from an established scale measured intrinsic religiosity and six items adopted from an established scale measured extrinsic religiosity (Allport, G.W. & Ross 1967). The religiosity items were asked at the end of the questionnaire to avoid priming the religious thoughts of respondents, which might have biased the choice of product packages.

7.7.1 Data analyses and results

Having discussed sample size adequacy and normality in chapter 6, the following subsections report on reliability and validity, distinct but related characteristics of a construct. Reliability is the internal consistency of measurements, whereas validity is the accuracy of measurements. Two key validity measures are convergent and discriminant validity (Anderson & Gerbing 1988; Campbell, DT & Fiske 1959; Fornell & Larcker 1981). Figure 7.1 summarises these tests and their assessments and the next section discuss the tests individually before fitting the model.

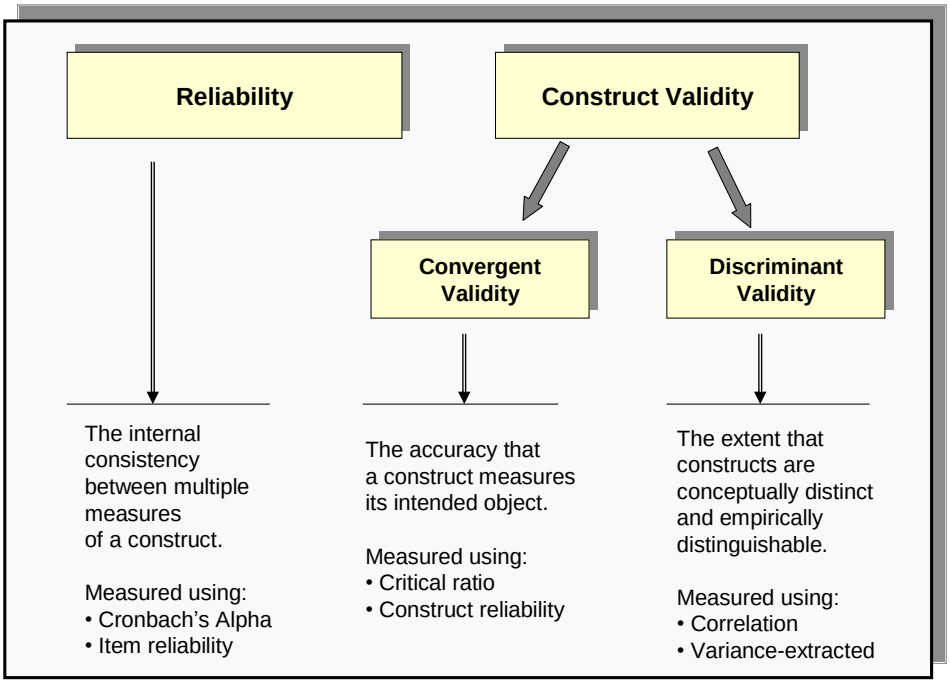


Figure 7.1 Assessing construct reliability and validity (adopted Lee, 2007, p. 140)

7.7.2 Reliability

Reliability indicates the internal consistency between multiple measurements of a construct (Hair et al. 2006). Emphasising the importance of reliability testing, Churchill (1979, , p. 68, emphasis original) stresses that 'coefficient alpha *absolutely* should be the first measure one calculates to assess the quality of the measurement'. Therefore, alpha coefficient was calculated for both of the constructs to test their reliability. *Cronbach's coefficient alpha* for intrinsic religiosity is .67 and extrinsic religiosity is .75 (see Table 7.14), close to the generally agreed threshold of .7 (Hair et al. 2006; Nunnally 1978). While reliability for extrinsic religiosity (.75) is acceptable on conventional threshold of .7, it is a bit below for intrinsic religiosity (.67). However, previous researchers have accepted the reliability of intrinsic religiosity below .7. For example, Walker, Smither and DeBode (2012) reported and accepted Cronbach alpha of .69 for intrinsic religiosity measure. These results indicated that the two constructs were reliable.

In addition to Cronbach's alpha, this dissertation used structural equation modelling to test reliability. This model-based approach may improve testing by accounting for measurement errors and the potential effects of latent variables (Anderson & Gerbing 1988; Holmes-Smith, Coote & Cunningham 2006). Particularly, *item reliability*, the square of the standardised factor loading, should be greater than .3 for a sample with more than 350 observations (Hair et al. 2006). Hence, the item reliability was tested for each item of the two constructs by taking the square of the standard factor loadings. First, the scale items assigned to both factors (intrinsic religiosity and extrinsic religiosity) were tested for their factor loadings and communality coefficients by running a Principal Component Analysis with varimax (orthogonal) rotation using SPSS 20. Orthogonal rotation was used to test each factor separately. As expected, the items for intrinsic religiosity were loaded on to a single factor without forcing one factor solution. However, items for extrinsic religiosity were forced to extract one factor solution (see Table 7.14). Then, item reliability was calculated for all items of both constructs by calculating square of factor loadings and that was greater than .3, the recommended threshold for all items (see Table 7. 15), indicting reliability.

Table 7.15 Item reliability for two constructs

	Item Reliability					
Item	#1	#2	#3	#4	#5	#6
	> .3	> .3	> .3	> .3	> .3	> .3
IR	0.352	0.527	0.391	0.494	0.454	-
ER	0.353	0.487	0.526	0.35	0.354	0.608

Hence, both methods, Cronbach's alpha and item reliability, establish internal consistency between multiple measures of the construct. The next section discusses construct validity by calculating convergent validity and discriminant validity.

7.7.3 Convergent validity

Convergent validity reflects how accurately a construct measures its intended object. It measures the statistical significance of the structural relationship between an observed item and its latent construct (Hair et al. 2006; Holmes-Smith, Coote & Cunningham 2006). Following Holmes-Smith et al.'s (2006) procedure, convergent validity requires that the *critical ratio* (*t*-value) of a construct's item is greater than 1.96.

Besides critical ratios, *construct reliability*, the internal consistency of a set of items rather than of individual item, can determine convergent validity (Hair et al. 2006). Using Fornell and Larcker's (1981) formula, construct reliabilities ranged from, over the recommended .7 threshold. Therefore, all constructs had convergent validity.

7.7.4 Discriminant validity

In contrast to convergent validity, discriminant validity estimates the extent that constructs are empirically distinct (Anderson & Gerbing 1988; Campbell, DT & Fiske 1959). Statistically, two constructs have discriminant validity if their *correlation* is less than .8 (Holmes-Smith, Coote & Cunningham 2006). As evident by calculating the correlations between two constructs (it was -.14, less than critical value), both constructs have discriminant validity.

Hair et al. (2006), however, caution that this test may fail to indicate discriminant validity because correlations as high as .9 can come from distinct constructs. Therefore, Fornell and Larcker (1981) recommend assessing discriminant validity by comparing the *variance extracted* estimates of a pair of constructs with the square of the correlation between the constructs. Variance extracted is the amount of variance captured by a construct compared with the variance due to measurement errors. If the variance extracted for two constructs is both higher than their squared correlation, the items represent their latent construct better than they represent the other construct, indicating discriminant validity. Therefore, by using Fornell and Larcker's (1981) formula, variance extracted (VE) was calculated. VE of IR is .444 and that of ER was .446. As mentioned the correlation between two constructs was -.14, hence squared correlation is 0.0196. Thus, VE of IR and VE of ER is greater than squared correlation, which indicates discriminant validity. Having tested for reliability and validity of constructs, the next section elaborates on fitting the model and model estimation.

7.7.5 Model fit measures

Structural equation modelling with MLE (www.spss.com/AMOS) was used to specify the model in Figure 7.2. Prior to fitting the structural model, as discussed in the previous sections, the data were analysed for construct reliability and validity. Correlation coefficients among all items ranged from .140 to .573, well below the .9 collinearity threshold (Hair et al., 2010).

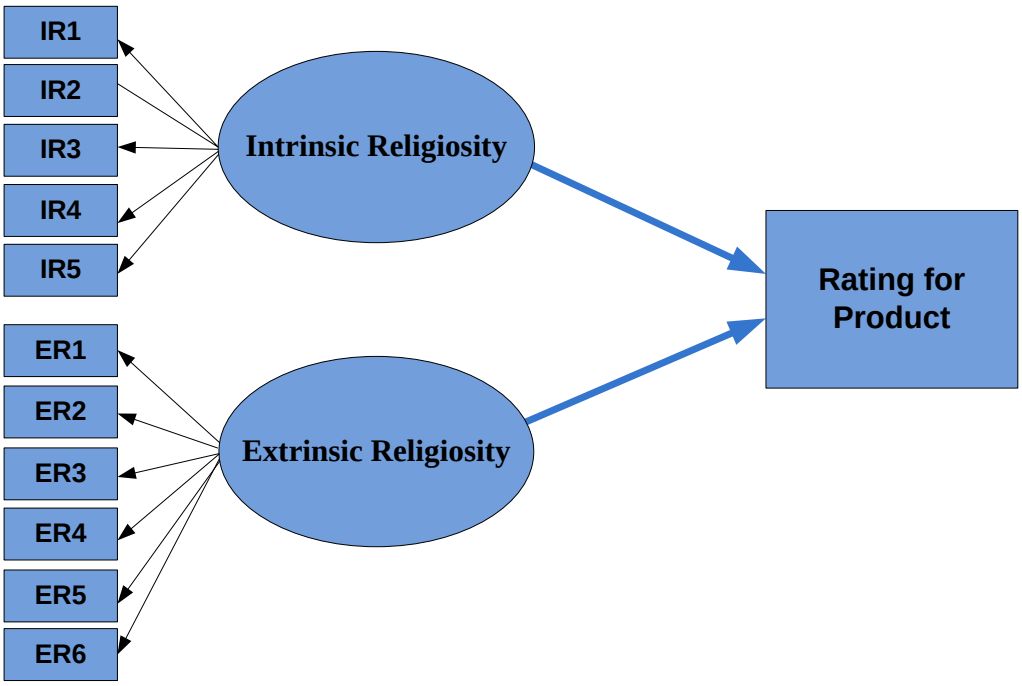


Figure 7.2 Conceptual model of study 4

The scale items assigned to both factors (intrinsic religiosity and extrinsic religiosity) were tested for their factor loading and communality coefficients by running a Principal Component Analysis with varimax (orthogonal) rotation using SPSS 20. Orthogonal rotation is used to test each factor separately. The items for intrinsic religiosity were loaded on to a single factor without forcing one factor solution. However, items for extrinsic religiosity were forced to extract one factor solution (see Table 7.14).

As mentioned, reliability was also adequate, with both factors across the survey having Cronbach's alpha of .67 for intrinsic religiosity and .75 for extrinsic religiosity (Peter 1979) (see Table 7.16).

Table 7.16 Descriptive statistics for items in the Study 4

Factors and Items	*M*	*SD*	Factor loading	Cronbach's α
Intrinsic Religiosity				**0.67**
IR1: I try hard to live all my life according to my religious beliefs.	**5.96**	**1.374**	**0.593**	
IR2: Religion provides meaning to life.	**6.42**	**0.928**	**0.726**	
IR3: I have often had a strong sense of God's presence.	**6.27**	**1.11**	**0.625**	
IR4: My whole approach to life is based upon my religion.	**5.91**	**1.223**	**0.703**	
IR5: I read about my religion regularly.	**5.56**	**1.391**	**0.674**	
Extrinsic Religiosity				**0.75**
ER1: I attend religious gatherings to spend time with my friends.	**4.89**	**1.704**	**0.594**	
ER2: Although I am religious, I do not let it affect my daily life.	**4.75**	**1.754**	**0.698**	
ER3: Sometimes I consider compromising my religious beliefs to protect my social wellbeing.	**4.79**	**1.869**	**0.725**	
ER4: It does not matter what I believe as long as I am good.	**4.96**	**1.626**	**0.592**	
ER5: Mosque is a good place to make friends.	**4.51**	**2.076**	**0.595**	
ER6: Although I believe in my religion, I feel there are many more important things in my life.	**4.42**	**1.903**	**0.78**	

Before further analysing the confirmatory factor analysis (CFA) and structural model, an explanation is given on how to evaluate the models. Though Arbuckle (2005) contends that model evaluation is among the most difficult and unsettled issues in structural equation modelling, there are numerous model fit measures and every type shows its specific capability in model evaluation. For example, degree of freedom (*df*) as measures of parsimony, is one of fit measure used for simplicity and goodness-of-fit.

Similarly, the Chi-Square statistic, the minimum sample discrepancy function, is an overall measure of how many of the implied moments and sample moments differ. The Chi-Square statistic (χ^2) is the minimum value of sample discrepancy divided by its degree of freedom. The ratio should be close to 1 for accurate models (Arbuckle, 2005), or should not exceed 3 to be accepted (Byrne, 2010). However, as the Chi-Square is sensitive to sample size, other measures should be taken into account that also support goodness-of-fit. As mentioned, the Chi-Square statistic is an overall measure of how many of the implied moments and sample moments differ. The *p-value* is the probability of getting as large a discrepancy as occurred with the present sample under appropriate distributional assumptions and assuming a correctly specified model. Therefore, a *ρ-value* is a method to select the model by testing the hypothesis to eliminate any model that is inconsistent with the available data or that which does not fit perfectly to infer the results to the population. The root mean square error of approximation (RMSEA), measures, based on the population discrepancy, is most commonly used, and it should be < 0.05 to achieve model fit. The significant indices for comparison to a baseline model are Normed Fit Index (NFI), Tucker-Lewis Index (TLI), CFI, AGFI and Goodness-of-Fit Index (GFI) and related measures (Arbuckle, 2005, Byrne 2010; Holmes-Smith et al., 2000).

In this study, all the above-mentioned fit measures have been tested and both the CFA and structural models achieved the criteria for model fit. As the study used an established two-dimension scale, CFA was performed to verify the measurement model for the intrinsic and extrinsic religiosity scales. MLE was used in AMOS 20.0. Five items loaded significantly on intrinsic religiosity level as expected (all $p <$ .001; see Table 7.16). Six items loaded significantly on extrinsic religiosity factor (all $p < .05$; see Table 7.16). The two factors were not significantly correlated (r = -.14, $p > .005$, = .347). For identification purposes, factor loadings for IR1 and ER1 were set to 1.

The overall fit of the model was acceptable ($\chi 2$ (42) = 1.63, p = .006, GFI = .87; CFI = .88; RMSEA= .086, p = .064). For a better fit, technically, the *p-value* should be insignificant, that is, greater than .05. However, as mentioned $\chi 2$ is sensitive to sample size and can result in rejecting a fit model. Therefore, Hair et al. (2010) recommended using other measures as the ratio of $\chi 2$ to degree of freedom (*df*) as a goodness-of-fit measure. A common acceptable ratio is below five, though below three is better. The ratio of $\chi 2$ to degree of freedom (*df*) in this model is .0388

(1.63/42), well below acceptable figure, that indicates a good fit. Similarly, other measures of goodness-of-fit (GFI, CFI and RMSEA) also indicate a good model fit.

Table 7.15 shows that fitting the structural model with two products and two price levels produced adequate structural model fits. The table provides goodness-of-fit statistics like CFI, TLI, RMSEA and Normed $\chi 2$. These figures can be interpreted in light of the above discussion. A comparison of these results with the critical values suggests that the hypothesised model fits the empirical data. With high symbolic value product (milk), intrinsic religiosity was significantly and positively related to the rating for product packages with symbols for both price levels. However, extrinsic religiosity was not significantly related to the rating for high symbolic value products. This supports H7a (intrinsic religiosity determines rating of the package of high symbolic value product with religious symbol more than extrinsic religiosity does).

On the other hand, extrinsic religiosity was significantly positively related to rating/liking of the product package of low symbolic value product with a religious symbol. In contrast, intrinsic religiosity was not significantly related to the rating of low symbolic value products (see Table 7.17). Therefore, H7b (extrinsic religiosity determines rating of the package of low symbolic value product more than intrinsic religiosity does) was also supported.

Table 7.17 Path coefficients of structural equation modelling

	Rating for high symbolic value product (milk)		Rating for low symbolic value product (film)	
Price levels	High price	Low price	High price	Low price
Structural model fits				
Comparative fit index	.93	.88	.83	.89
Tucker-Lewis index	.91	.83	.77	.84
Root mean square error of approximation	.06	.08	.10	.08
Normed $\chi 2$	1.44	1.89	1.85	1.87
Intrinsic religiosity --- product package rating	.49	.33	.15	-.38
P	.045	.004	.573	.091
Extrinsic religiosity---- product package rating	.12	-.21	1.58	1.45
P	.590	.172	.032	.001

7.8 Summary

This chapter reported the results of choice models, structural equation modelling and other tests. The conceptual model and hypotheses developed in chapter 5 were tested using different statistical techniques. In study 1 and 2, the results of choice modelling and binomial tests demonstrated an overall preference for product packages with symbols for Muslim consumers. Also, in study1, the mean comparisons found that the respondents from Malaysia showed a significantly more positive attitude towards the use of symbols on packaging. In study 2, however, while Pakistani respondents selected the product package with the symbol more often than the product package without the symbol, their attitude towards both packages was not significantly different. This peculiarity is discussed in the next chapter (chapter 8). Similarly, study 2 showed the impact of different legislation in these two Muslim countries.

Having established the positive impact of symbols on consumer responses, study 3 considered and tested the influence of verbal cues. However, consistent with the postulations, the results showed similar responses to the use of verbal cues from local languages and English. Overall, the results were similar for both countries and both product categories hypotheses were tested by using choice modelling. Finally, the results of structural equation modelling in study 4 proved the interaction between religiosity type and product type. Table 7.18 provides a summary of hypotheses testing.

After the description of results in this chapter, the next chapter concludes the thesis with a general discussion of findings, academic and mangerial contributions and avenues for future research.

Table 7.18 Summary of hypotheses testing

	Hypotheses	Sample	Results
H1	Muslim consumers choose products with religious symbols on product packaging over those without religious symbols.	Malaysia	Supported
		Pakistan	Supported
H2	Muslim consumers' rating of products with religious symbols on product packaging is higher than those without religious symbols.	Malaysia	Supported
		Pakistan	Not supported (in proposed direction)
H3	Compared to Muslim consumers from non-legislated countries, Muslim consumers from Halal legislated countries are more likely to choose products with symbols on their packaging.	Malaysia v. Pakistan	Supported
H4	Compared to Muslim consumers from non-legislated countries, Muslim consumers from Halal legislated countries rate products with symbols on their packaging higher.	Malaysia v. Pakistan	Supported
H5	For bilingual Muslim consumers, the influence on choice of local language on product package does not significantly differ from that of English language on product package.	Malaysia	Supported
		Pakistan	Supported
H6	For bilingual Muslims consumers, the rating of the product package in local language does not significantly differ from that of English language.	Malaysia	Supported
		Pakistan	Supported
H7a	For high symbolic value products, intrinsic religiosity determines the rating of the product with a symbol more than extrinsic religiosity does.	Pakistan	Supported
H7b	For low symbolic value products, extrinsic religiosity determines the rating of the product with symbols more than intrinsic religiosity does.	Pakistan	Supported

8. Discussion and implications

This dissertation applied the SIT to study Muslim consumers' behaviour and attitudes. Religion is an important predictor of consumer behaviour and attitudes and it demands greater attention in the marketing literature (e.g., Alserhan 2010). This study represents a nascent stream of research addressing how one's religious affiliation and degree of religiosity can influence consumer behaviour, specifically in relation to marketing communication. Against a contextual background of potential and growth in Islamic consumer markets, this thesis extended and applied the SIT to investigate Muslim consumer responses towards the use of symbolic cues on product packaging. SIT is mostly used in social domains, whereas this study incorporated this social theory to marketing and specifically, consumer behaviour. Further, this study is the first to examine how Muslim consumers derive meanings from functional as well as symbolic products. In this way, a key contribution is the exploration and investigation of symbolic cues on product packaging, a relatively under-researched area compared to advertising.

This chapter presents a discussion on the findings of this study and explains how research provides substantive academic, methodological and managerial contributions. At a theoretical and academic level, the findings are applicable to marketing, consumer behaviour and marketing communications research. Likewise, methodological contributions include the use of the choice modelling approach, which is scarce in consumer behaviour studies, as no published study has applied this approach to the use of religious symbolic cues. Managerial contributions encompass recommendations for marketers and marketing communications experts, especially international marketers and the organisations that target or intend to target Muslim consumers.

Two research streams guided the dissertation captured in the four studies. The first stream applied the SIT as a theoretical framework and investigated how Muslim consumers may be influenced by the presence of symbols on product packaging. The consumer responses were measured in terms of both behaviour (choice) and attitudes (rating). The second study investigated the role of labelling laws to determine consumer preference and attitudes in two different countries in the Muslim world: Malaysia and Pakistan. Common to both streams is the influence of religious symbols on product packaging and the influence on Muslim consumer responses across different labelling laws. The third study investigated the role of verbal cues (language) on product packaging, as the use of verbal cues (local and [foreign] English language) was manipulated on product packages to investigate the effects of consumer responses. Finally, the fourth study tested the influence of religiosity dimensions on consumer attitudes towards the use of religious symbols on packages of high and low symbolic value products. As the dissertation topic suggests, Muslim consumer behaviour and attitudes towards the use of symbols and verbal cues on product packaging is the key research contribution. This dissertation posed four research questions, which to the author's knowledge, no published study has yet explored. Following is the sequence and brief outline of the sections in this chapter.

Centred on answering the four research questions in the four studies, this chapter begins with section 8.1, which provides a general discussion of the results presented in chapter 7. This section sheds light on the achievement of research objectives and answers research questions RQ1, RQ2, RQ3 and RQ4, which were set in chapter 1. In particular, consideration is given to the existing literature that is relevant to this study, as this section also elaborates on the consistency between the findings of this study and past studies. Moreover, this section offers propositions when there are discrepancies between the findings of this study and findings in any other previous studies.

Section 8.2 discusses the academic contributions of the empirical findings, whereby this section outlines the vital theoretical contributions to consumer behaviour. Section 8.2 also highlights the applications of the SIT to Muslim consumers and the symbolic value of different products for Muslims. Contrary to the general proposition that functional products lack symbolic value, this section argues that Muslim consumers derive symbolic value from functional products. Further, this

section discusses how consumers process product packaging differently from advertising.

Section 8.3 offers methodological contributions, as this section covers the use of choice modelling, which is rarely used in consumer behaviour area and as of now, has never been used to study the impact of visual symbolic cues (symbols and verbal cues) on product packaging. Similarly, consumers' WTP for the addition of a religious symbol on product packaging is explained in this section.

Section 8.4 offers managerial implications and contributions. International marketers, especially those dealing with Muslim markets, can benefit from the findings of this study. The importance of religious symbols for Muslim consumers and how it relates to the different product types is also elaborated in this section.

Finally, section 8.5 concludes the chapter and dissertation by identifying limitations and future research avenues. This section identifies limitations in terms of sample and survey method. It also discusses the options for future researchers to advance this area.

8.1 General discussion

8.1.1 Muslim consumer responses to the religious symbols

Being the first study to examine the use of Islamic religious symbols on product packaging, the pre-tests identified the religious symbols associated with Islam and the products of high and low symbolic value. These pre-tests endorsed that Muslims are fairly familiar with the associated religious symbols. Based on the conviction that marketers employ religious symbols in marketing communications to get noticed in clutter (Mallia 2009), the first study considered Muslim consumers' responses to the use of religious symbols on product packaging. The objective of the first study was to answer research question 1, presented in chapter 1 as follows:

> **RQ1: How does the visual presence of symbols on product packaging influence Muslim consumer perceptions and choice of products?**

The results from the first study revealed that Muslim consumers prefer the product package with a religious symbol compared to a product package without a

religious symbol for both food and non-food product categories. Therefore, the support for H1 (Muslim consumers choose products with symbols on product packaging over those without symbols) underpins the importance of religious symbols as visual cues to be employed in marketing communications. Similarly, the use of symbols on product packaging was independent of the product category: food and non-food products. However, the preference for a product package with a symbol for food products may decrease the doubt about ingredients and processing of the product. Yet, as the impact extends to the non-food sector, it shows that such preference is because of self-expression and closeness to other Muslims in society.

The results infer that Muslim consumers may be more attentive to the packaging of products with religious symbols. However, whether consumers were merely paying more attention to a symbol on a product's package was not a direct goal of this study. Hence, the study employed a choice measure to examine the behavioural preferences of Muslim consumers. Being the first empirical study to employ choice measure for tapping consumer responses to such symbols, no past studies are available for comparisons. A possible reason as to why Muslim consumers may prefer the presence of religious symbols could be that the symbol helps Muslims choose the product without risk and portrays their self-identity and belongingness to a particular religious group. In addition, the results suggest that symbols carry meanings that can be transferred to products. These perceived meanings of symbols are conveyed via product packages.

The support of H2 (Muslim consumers' rating of products with symbols on product packaging is higher than those without symbols) reinforces the importance of religious symbols on product packaging. As discussed, attitudes are relatively enduring compared to the choice made at the point of purchase. The results suggest that Muslim consumers in Malaysia hold positive attitudes towards a product package with a religious symbol. Hence, these positive attitudes may be attributed to their heightened attention and search for a symbol on a package (explained later in study 2). Overall, the results of study 1 suggest that Muslim consumers prefer products with a symbol on its packaging and that they evaluate the packaging with religious symbols more positively. In other words, there is a positive relationship between the use of religious symbols on product packaging and consumer responses, in terms of both behaviour (choice) and attitude (rating/evaluation).

However, the findings from this thesis conflict with a past study by Dotson and Hyat (2000) where the authors did not find support for their hypothesis and showed that consumers reacted less favourably to the pet health insurance advertisement and brand containing the Christian symbol, a Cross. The authors expected respondents to show positive attitudes, but respondents seemed to be offended by the presence of such a symbol because it was sacred to them. The authors attributed their findings to the choice of product in their experiment. The findings of Dotson and Hyat also support other past studies, as studies have shown that religious people have found some advertisements offensive to them (Fam, Waller & Erdogan 2004). Fam et al. (2004) conducted a multi-country study on the influence of religion on attitudes towards advertisements of controversial products (e.g. alcohol, cigarettes and weapons) from respondents of Malaysia, Turkey, Taiwan, China, Britain and New Zealand. Across respondents of all countries, the findings indicated that people that are more religious were more likely to find the advertisements of controversial products offensive. Indeed, the inappropriate use of religious cues in advertising is perceived as offensive, especially when the advertised products were perceived as irrelevant or controversial to their religion (Dotson & Hyatt 2000; Mallia 2009).

Similarly, there are numerous business examples where the use of religious symbols was inappropriate and offended consumers. For example, Sony had to withdraw its PlayStation advertisement on the complaint of the Vatican that 'You cannot adapt the Passion of Christ for an advert for a video game' (Sony and Paddy Power ads upset Catholics 2005). By contrast, the product categories used in this study are not controversial or offensive; rather, these possess high symbolic value for Muslim consumers. Therefore, the study showed positive behaviour and attitudes towards this appropriate use of religious symbols. The literature also provides support for the findings that individuals respond positively to the use of religious symbols when the product is appropriate. For example, Taylor et al. (2010) found that Christian consumers showed higher purchase intentions for the service provider (e.g. plumbing and electrical services), when the Christian symbol (Ichthys) was present in the advertisement. Therefore, the product type plays an important role in the use of religious symbols in marketing communications. While the use of religious symbols with controversial products can evoke negative responses from consumers, sensible use is effective for both food and non-food categories.

8.1.2 Difference in Halal legislated versus non-Halal legislated countries

Having established that religious symbols influence Muslim consumer behaviour and attitudes, study 2 was conducted as a follow up study. One objective of study 2 was to increase the generalisability of the results of study 1. Therefore, the same two hypotheses tested in study 1 were again tested in study 2 using a different sample from a different country: Pakistan. While the results reaffirmed that Muslim consumers choose a product package with religious symbols over a product package without a symbol (H1), there was no significant difference in the attitudes towards the product package with and without symbols (H2). The generally consistent support for H1 in both of the studies alludes to the importance of symbols for Muslim consumers across the globe, irrespective of whether they are from a Halal legislated country or non-Halal legislated country. However, H2 was not supported in study 2, which reflects some underlying differences between the two countries. As discussed, although Malaysia and Pakistan both are Muslim majority countries, there is a difference in their labelling laws. Due to the different population structure, these different labelling laws seem to affect the consumer attitude towards the labels and thus, packaging in general. Hence, the second objective of study 2 was to answer the research question 2 as follows:

> **RQ2: Comparing Muslim consumers in Halal-symbol legislated versus non-legislated countries, how does the visual presence of symbols on product packaging influence perceptions and choice of products?**

The results of study 2 establish that the labelling laws of a country can affect the attention and thus the attitude of consumers towards labels and product packages. The support for H3 (compared to Muslim consumers from non-legislated countries, Muslim consumers from Halal legislated countries are more likely to choose products with symbol on their packaging) suggests that symbols are even more important for Muslim consumers in countries with labelling laws. While labelling laws mandate the use of Halal symbol on packaging of products suitable for Muslim consumption in these countries, the practice has increased the importance of other religious symbols as well.

Halal symbols play a vital role in determining whether the product is appropriate for Muslim consumers, as Muslims are very particular about such symbols, especially where there is a more diversified population. For example, Nooh et al. (2007) in their study investigated the factors that influence the purchase probability of Muslims and found that the Halal symbol is the most important element considered by Muslims in Malaysia. Further, Muslims in Malaysia reported the Halal symbol as more important than certification by the International Standard Organisation (ISO) (Shafie & Othman 2006). Therefore, greater preference for a religious symbol by Malaysian consumers in this study is not surprising. Out of their habit of paying more attention to the Halal symbol, they seem to be attracted more, even to other than Halal religious symbols. Moreover, the labelling laws encompass food products, as there is greater chance of inappropriateness for Muslim consumers, therefore the use of the Halal symbol is crucial.

This result is also consistent with some other past studies. For example, researchers have contended that consumers can make decisions based on information on the label if they have difficulty in making a choice (Bredahl 2004; Imm, Lee & Lee 2012; Mueller & Szolnoki 2010). In Malaysia, consumers can expect to find products in retail stores that are not suitable for Muslim consumption, therefore, they are more likely to pay attention and decide based on the label on the package, compared to their Pakistani counterparts. Although respondents from both countries showed preference for a religious symbol on product packaging, Malaysian respondents showed a greater preference in comparison. As mentioned, this can be attributed to their greater uncertainty about the Halal nature of the products available in the market. Their lack of confidence on their intrinsic or own judgement is in line with Zeithaml's (1988) proposition that the usage of label cues will be relatively higher when consumers perceive it difficult to evaluate the quality of product. Similarly, previous research suggested that organisations can use the product packaging to differentiate their products for greater success and profits (e.g., Verbeke 2005). In countries like Malaysia, this strategy is more useful when consumers are particularly searching for differentiated products. However, this study established that the use of symbols is also effective for non-food product categories, as respondents showed significant difference in the preference for a non-food product (e.g. the pen) when a symbol was employed on the package.

Similarly, the support for H4 (compared to Muslim consumers from non-legislated countries, Muslim consumers from Halal legislated countries rate products with symbols on their packaging higher) suggest that consumers in label legislated countries hold more positive attitudes towards the use of religious symbols on product packaging. This phenomenon concurs with the researcher's discussion with Muslim scholars and practitioners of marketing (detailed in chapter 6: Research Methodology; Validation of elicitation survey) where they pondered about the purpose of putting a religious symbol on product packages. In Muslim countries, where the use of such religious symbols is required by the government, consumers are used to the presence of symbols and have developed an attitude towards such symbols. These consumers presume that this particular product is more appropriate for Muslims because of the presence of a religious symbol. Therefore, the attitude is generally more positive to the product package with a symbol presented, as compared to a product package without a symbol. On the other hand, a country where there is no such legislation, although consumers prefer a product with a symbol compared to a product without a symbol (H1), consumers show relatively less positive attitude compared to their attitude in Halal legislated country. The presence of symbol is not as important as it is to consumers who are attuned to specifically search for a symbol (H3). In their point of purchase decisions, consumers tend to choose a product with a symbol, but do not hold a particularly strong attitude towards the use of that symbol. Collectively, these findings endorse the enduring nature of attitudes, compared to impulsive choice or behaviour.

These findings, however, are contrary to the constructive view of attitudes. The constructive view of attitudes assumes that consumers form an attitude according to the context and situation and that the attitudes do not relate to the memory of the consumer (Reed II, Wooten & Bolton 2002; Schwarz & Bohner 2001). Hence, this constructive view relates to the temporary and situational motivations of consumers. The results of this study, however, suggest otherwise, as for the constructive theory to be true in this context, there should be no difference in the findings related to the choice and rating of consumers. Whereas, this study found that Pakistani consumers prefer a product package with a symbol, but there were no significant differences in the rating. On the other hand, Malaysian consumers not only prefer a product packaging with a symbol, but their rating was greater for that package.

In fact, these results are consistent and favour the functional theory of attitudes, as according to functional theory, attitude is a 'psychological tendency expressed by evaluating a particular entity with some degree of favour or disfavour' (Eagly, Alice H & Chaiken 2007, , p. 582). Thus, this theory relates to the enduring nature of attitudes and that attitudes are retrieved from memory. In this study, Malaysian consumers habitually see and search for a religious symbol on a product's packaging and so with the passage of time, they have also developed an attitude. By contrast, Pakistani consumers show greater preference in their choice but are insignificant in their attitudes, as this phenomenon is not yet formed and stored in their memory and the attitude has not yet been created. The functional theory of attitudes also postulates the attitude formation process and why people form attitudes. Attitudes are based on the individual's knowledge about an object (or symbol in this case) (Fazio 1989), as people organise and synthesise knowledge in the form of attitudes (Grewal, Iyer & Levy 2004). Hence, the greater the knowledge of Malaysian consumers about religious symbols might result in forming more positive attitudes towards the use of such symbols on product packaging, regardless of product category.

Overall, study 1 and study 2 establish the importance of religious symbols on product packaging for Muslim consumers across the world. The presence of a symbol makes a significant difference in the choice consumers make, compared to a product without a symbol in both countries: Malaysia and Pakistan. Malaysian Muslims also have a significantly more positive attitude towards the use of religious symbols, which can be attributed to the labelling laws in that particular country. Contrary to the above hypothesis, the insignificant difference in the attitudes of Pakistani consumers towards the presence or absence of religious symbols underpins the complexities involved in attitude formation.

8.1.3 Bilingual Muslim consumers and verbal symbolic cues on product packaging

Study 1 and study 2 established the positive influences of the use of religious (visual cues) symbols on product packaging on Muslim consumer responses. As explained in the method section, these two studies employed a visual religious symbol as an image on a product's packaging. In order to test the effects of verbal cues and drawing from the literature review, language is associated with culture and religion

in Muslim countries. Therefore, study 3 sought to answer the following research question:

RQ3: What are the effects of verbal cues (national or foreign language) on product packaging for bilingual consumers?

The results showed support for H5 (for bilingual Muslim consumers, the influence on choice of local language on product package does not significantly differ from that of English language on product package) and H6 (for bilingual Muslims consumers, the ratings of the product package in local language do not significantly differ from that of English language). The study further revealed that both national (Malay in Malaysia and Urdu in Pakistan) and foreign (English) languages on product packaging do not differ in terms of product choice (behaviour) and evaluation (attitude) by bilingual Muslim consumers**.** The respondents from the two countries were fluent in the two languages. The findings in this study are useful to understand the differential effects of the use of language on product packaging, as compared to the effects in advertising found in previous studies. Contrary to the findings in advertising context (e.g., Krishna & Ahluwalia 2008; Luna & Peracchio 2001, 2005a, 2005b), the language on product packaging did not influence consumer responses across the two product categories (food and non-food products), in both of the countries.

The previous studies on the use of local versus foreign language in marketing communications are inconclusive in establishing the effectiveness of one language over the other. One of the two arguments postulates the differential effects of these languages. In one such study, Krishna and Ahluwalia (2008) investigated the effectiveness of local language compared to the English language by using different types of products (necessity versus luxury) from different types of companies (multinational versus local). The authors suggested that there are different associations for different languages, whereby the local language was more associated with closeness and belongingness and the English language was more associated with sophistication. The results also showed that the advertising language affects multinational companies more so than local companies. For multinational companies, respondents evaluated a message in English language more favourably than a message in their local language for a luxury product (chocolate), and a

message in their local language was evaluated more favourably for a necessity product (detergent). The findings of this study can be attributed to the advertising context, which is different from packaging. Moreover, this study tested for the language effects with reference to the different types of companies (multinational versus local) and different types of products (necessity versus luxury), which were not variables of interest in this thesis. Nevertheless, these manipulations are later discussed in the limitations section and offer an avenue for future research. Yet, the results of this thesis contradict the findings of such previous studies in advertising and show the different effects of local language to foreign or English language (Luna & Peracchio 2001, 2005a, 2005b).

Conversely, the second argument suggests similar effects of local language compared to foreign language in advertising. In such a study, which is also in advertising context and particularly with Muslim consumers, the authors did not report difference in attitudes, although they reported differences in the perception of product because of the different language used. Nikerson and Camiciottoli (2013) examined the attitudes of Muslim consumers towards the use of Arabic and English language in advertising texts in UAE. The authors discovered that the language used in advertising influenced the perception of the product being advertised as basic or advanced. However, the findings suggested that the language used in advertising did not significantly affect the respondents' attitude towards the advertisement and attitude towards the product advertised. Thus, the results of this study are in line with and endorse these findings. One explanation may be that, because of frequent use of English language, bilingual Muslim consumers have accepted English as a *lingua franca* in marketing communications. Therefore, they do not show significant differential preferences for their national or English language, especially in packaging, where chances for memorable associations are relatively less.

Thus, the findings are consistent with the expectations as product packaging is processed differently from advertising (this is detailed in next the section: research implications). Advertising may include words that can evoke certain emotions or associations, whereas packaging generally contains objective information. Apart from the colour, shape and size of the package, usually, product packaging includes brand name, pricing information and/or some other key product features. From these features, product name and price are less likely to make any language related difference. For example, a Coke will be a Coke despite it being mentioned in a

national language or a foreign language. Similarly, pricing information is the monetary value of the product that also seems to be independent of language used.

The results are also consistent with the greater effectiveness of logos and symbols over verbal texts (Vardavas et al. 2009) and the positive impact of pictures in advertising (Childers & Houston 1984; Miniard et al. 1991; Unnava & Burnkrant 1991). While this study did not directly compare the use of symbols to the use of verbal symbolic cues, an analogy can be assumed between the effectiveness of symbols and verbal cues. The results from this study showed that consumers hold more of a positive attitude and behaviour to a product that has a religious symbol on its package compared to a product package without any religious symbols (in study 1 and 2). On the other hand, in the third study, consumers did not significantly differ in their behaviour or attitudes to the use of national language as compared to the use of foreign (English) language on product packaging. Collectively, the results suggest greater salience of religious symbols over verbal symbolic cues. Therefore, these results support previous studies that establish the significance of symbols over verbal cues. For example, Vardavas et al. (2009) investigated the effectiveness of graphical tobacco product labelling among adolescents.

In order to test the perception of the graphic tobacco product warning labels, the authors recruited 574 adolescents from Greece and interviewed them privately. The respondents were randomly shown text only (verbal) and graphic warning labels (images). The authors found that the images were more effective in preventing adolescents from smoking than the verbal or text only labels. Hence, symbols on product packages are more important and salient attributes compared to words or verbal cues. In fact, symbols can also provide more differentiation and appeal to consumer consciousness at the point of purchase. Images are shown to be more prominent than words (Underwood, Klein & Burke 2001), whereby images are more likely to evoke positive associations in a short span of time. On the basis of their findings for superiority of (product) images, Underwood et al. (2001), interestingly, recommended the use of images on product packaging as a ‘must use’ for experiential products and ranging from ‘might use’ to ‘must use’ for functional products depending upon brand familiarity (high versus low). Hence, this study alludes to the power and effectiveness of symbols over verbal cues.

In short, collectively the results of the three studies suggest the power of symbols over verbal cues and different processing of product packaging compared to

advertising. Overall, there were significant differences in the preference for a product packages with symbols to those without symbols, whereas the verbal cues on product packages did not show any differential impact on the responses. The findings of these studies also highlight the practical difference in consumer attitudes and behaviours.

8.1.4 Product category and religiosity interaction

Thus far, the three studies have established the link between religious affiliation, at least for Muslims, and consumer behaviour. However, these studies did not explore how consumers' degree of religiosity can influence their consumption patterns. Religiosity encompasses the religious affiliation and an individual's commitment to act according to the religious teachings. A review of past studies showed that religiosity is an important predictor of consumer behaviour (e.g., Choi, Paulraj & Shin 2013) and a few studies even suggest that religiosity has a greater effect than religious affiliation. Therefore, it is worthwhile to explore if consumer attitudes differ along different levels of religiosity and thus, study 4 was conducted to answer research question 4 as follows:

> **RQ4: What are the effects of the interactions of (symbolic values x consumer religiosity) on the effects of symbols on product packaging?**

Earlier, the pre-tests identified the products of different symbolic value for Muslim consumers. The first three studies employed religious symbols with products of high symbolic value, which included food and non-food products to increase generalisability. Whereas, as elaborated in the method section, Study 4 selected one high symbolic value product (milk) and one lower symbolic value product (western film DVD). Further, a consumer sample resembling the actual population structure was recruited for this study. The literature review has shed some light on consumer behaviour and has also stated that consumer behaviour may also vary with varying levels of consumer religiosity. Therefore, this study takes into account the two dimensions of religiosity as intrinsic religiosity and extrinsic religiosity.

As expected, the results showed support for H7a (for high symbolic value products, intrinsic religiosity determines the rating of the product with a symbol more than extrinsic religiosity does). These results suggest that the influence of

religious symbols varies with the level of religiosity. However, the results conflict with previous findings by Dotson and Hyatt (2000), who reported that individuals with high religiosity showed a less favourable attitude towards the brand when the advertisement contained Christian religious cue (the Cross). Similarly, individuals with high religiosity showed lower purchase intentions when the advertisement contained a Cross. While one reason the authors provided to this occurrence is the nature of religious cue as a peripheral cue and the type of product, this can also be attributed to the measurement of religiosity in their study. The authors used a 21 item-scale developed by Fagan and Breed (1970). The scale developers reported the appropriateness of this scale for Christian respondents but this scale treats religiosity as a one-dimensional construct. The fewer citations of this scale also question its effectiveness to tap the complex phenomenon of religiosity (Google Scholar showed only 10 citations in March 2014). On the other hand, this thesis takes into account the two dimensions of religiosity as intrinsic and extrinsic religiosity. The study adapted the scale developed by Allport and Ross (1967) and customised to it to suit Muslim respondents.

According to this comprehensive conceptualisation of religiosity, the scale categorises the respondents into intrinsically religious and extrinsically religious people. The heavy use of this scale in religiosity measurement refers to its greater appropriateness (Google Scholar showed 2,813 citations in March 2014). Therefore, the contradictory findings in this study can be attributed to the robust measurement of religiosity and appropriate attention given to the choice of products used in this study.

The results in this study are in line with the common understanding that intrinsically religious people actually live their religion. Therefore, they like the religious symbol on high symbolic value products more than extrinsically religious people, who may be following their religion for social objectives. The type of product is also important in this context. The high symbolic value product (milk) is a privately consumed utility, whereas the low symbolic value product (the film DVD) is more hedonic in nature and may be consumed collectively, as consumers may watch a film in a group. These product attributes resemble the characteristics of intrinsically religious people and extrinsically religious people. Therefore, the results also show support for H7b (for low symbolic value products, extrinsic religiosity of the product determines the rating of the product with symbols more than intrinsic

religiosity does). The type of products and the religiosity of respondents, in fact, interact in developing favourable responses for the use of religious symbols on packaging.

8.2 Academic contributions

According to MacInnis and Folkes' (2010) view of consumer behaviour, religion needs to be considered as an individual difference variable in consumer behaviour research. Hence, an objective of the study is to develop awareness and profound understanding of interplay between religion and consumer behaviour. Despite the importance of religion in our daily lives, especially with Muslims, it is largely ignored in consumer behaviour research. Currently, studies linking religion to consumer behaviour are rare (for exceptions see Choi, Paulraj & Shin 2013; Esso & Dibb 2004; Shachar et al. 2011). Moreover, past research is overwhelmed with definitions, conceptual and measurement issues (Vitell & Paolillo 2003; Wilkes, Burnett & Howell 1986). Similarly, most of the previous research on the influence of religion is conducted at the macro level (Kale 2004; McKee 2005; Mittelstaedt 2002). A key contribution of this study is in melding research in religiosity and consumer behaviour. As an initial study in this stream, this study identified the symbols that are associated with religion Islam and the products of high and low symbolic value for Muslim consumers. Particularly, this study contributes to the marketing communication research by determining the influence of religious symbols and verbal cues (language), via product packaging, on consumer behaviour. To this author's knowledge, no published study has addressed this issue before. This study also highlights the psychological underpinnings of Muslim consumers from a religion perspective.

The traditional view of products and consumer behaviour classifies products as either functional or symbolic products. According to the classification, consumers can derive either functional benefits from products or symbolic benefits (e.g., Keller 2003; Park, Jaworski & Maclnnis 1986) (see Figure 8.1). However, this study contradicts this traditional thought by showing evidence that Muslim consumers derive functional as well as symbolic meanings from same products.

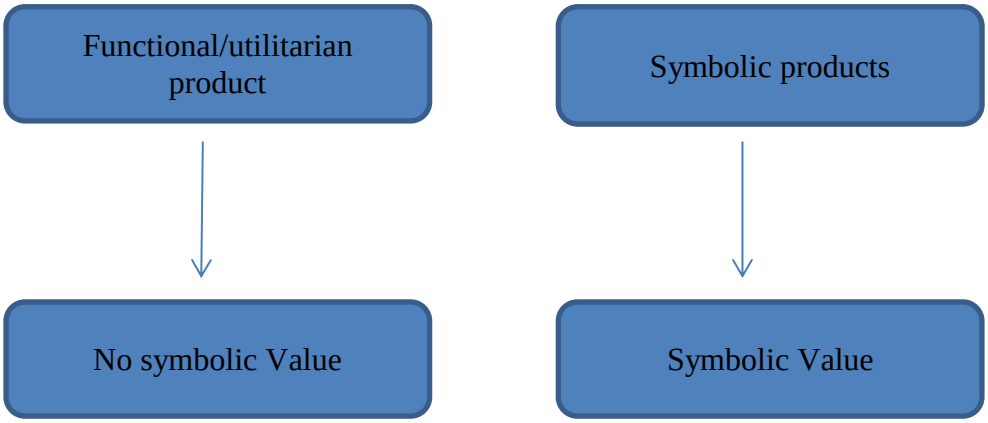


Figure 8.1 Traditional positioning strategy

This study contributes to the academic research on product attributes by investigating consumer perception of product functions and their value for consumers. Importantly, the products identified in this study showed that Muslim consumers drive symbolic meaning, particularly religious symbolic meaning, and value from functional as well as expressive and symbolic products (see Figure 8.2). This can occur because Muslims see their everyday activities, including consumption, in light of their religious teachings. Hence, this phenomenon has important implications for developing a marketing communication strategy for Muslim consumers (further details are discussed in the managerial contributions section).

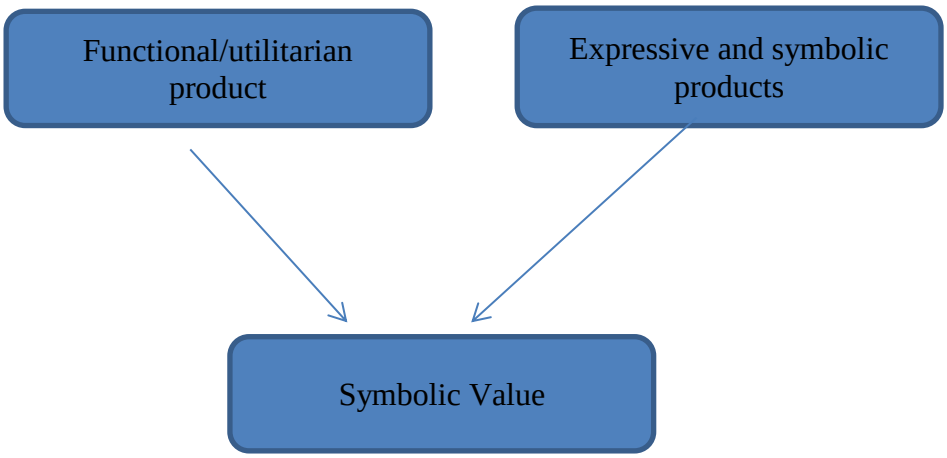


Figure 8.2 Muslim consumption positioning strategy

Further, this thesis, for the first time, used the SIT to uncover and explain the influence of religious cues on Muslim consumers' responses. The theory is mostly

used in sociology research and this study extends its use to marketing and Muslim consumer behaviour domains. The main premises of the theory mentioned in the literature review are well fitted to the findings of this study, as the findings of this study coincide with other research streams employing this theory.

Another contribution is the implied mechanism of paying attention to different attributes. The study considered bottom up and top down approaches of paying attention to the cues on product packaging. This study is the first one to confirm different patterns of paying attention (as hypothesised) in different countries due to their labelling laws. From the results, Malaysian consumers choose a product package with a religious symbol more often (greater coefficient) than their Pakistani counterparts because of this different approach of paying attention. As Malaysian consumers have specific motivation to search for a label on product packages, they are likely to use the top down approach, whereas Pakistani consumers are likely to use the bottom up approach. This difference can be attributed to different labelling legislation in these two countries.

Most studies on religion and marketing communication interaction are set in western contexts (e.g. Dotson & Hyatt 2000; Taylor, Halstead & Haynes 2010). As Islam governs all aspects of Muslim lives, including product consumption, this study extends this research stream to purchase behaviour in under-researched Islamic markets. By conducting the research in two Muslim countries—Pakistan and Malaysia—this study highlighted similarities and differences among Muslim consumers from different countries, which are associated by having a common bond of religion but also have a different population structure. The different population structure in different Muslim countries has important academic research implications. While consumers in both countries prefer product packages with symbols to product packages without symbols, Malaysian consumers also hold positive attitudes for symbols. Hence, these findings suggest an underlying process of attitude formation and the worth of different methods to tap consumer responses (see the next section, methodological contribution, for further information).

Further, this study affirms that the symbol's influence extends beyond advertising to packaging, whereas it is not the same scenario for verbal cues. With advertising, consumers may view the advertisements in different places such as on television at home, on roadside billboards or on the radio while driving. By contrast, consumers' notice of product packaging most likely occurs at the point of sale,

usually in retail stores. Moreover, consumers are more likely to view an advertisement longer than they would scrutinise packaging.

Finally, the study applied the religiosity scale proposed by Allport and Ross (1967). This scale essentially attests to two dimensions of religiosity: intrinsic and extrinsic religiosity, which is commonly used in measuring Christian religiosity. Although it suits Christianity well, as it includes items like 'attending church regularly', the study customised it to measure Islamic religiosity and it worked well as theorised for Muslim consumers.

In short, this study discussed consumption as a topic that goes hand –in-hand with psychological and social aspects of consumers. More specifically, it shows that consumption is a social phenomenon that involves the interaction between consumers, marketers and retailers. This interaction creates, maintains and communicates meanings, for example, via symbols. This thesis is an attempt to bring us closer to understanding how symbols transfer meanings to products.

8.3 Methodological contributions

This study adopted a unique approach to gain further insight into the behaviour and attitudes of consumers about the same marketing stimuli. This method sheds light on the consistency between behaviour and attitude and brings forth potential inconsistency between the two. By using the two approaches simultaneously, this method endorsed the complex and enduring nature of attitudes and attitude formation. This phenomenon required a systematic and logical design of the experiments and cannot be captured with one method.

However, a specific contribution of this study is to analyse consumer behaviour (choice) by MNL choice modelling. As explained earlier (in the literature review and research methodology), choice experiments have the capability to apprehend and manipulate a theoretical stimuli. The study used a comprehensive design to capture behaviour and attitude simultaneously and choice modelling analyses techniques are employed to analyse the data. These are unique methodological contribution of this study. DCEs are relatively less used in consumer behaviour research and there is not published study to date that has employed this type of method for investigating religious symbols.

This is the first study to consider religious symbols as a product package attribute and employ DCEs for investigating preference. As mentioned, the weakness of this method is that it does not address on how and why of a particular choice. Therefore, this study also uses an attitudinal scale to overcome this shortcoming and better understand the consumer psychological underpinnings involved in the influence of a religious symbol.

Another key methodological contribution is the WTP analyses for religious symbols on product packaging. The WTP concept is originated from welfare economics (Louviere, Hensher & Swait 2000) and is calculated as a marginal rate of substitution of a particular attribute at various price levels (see analysis for further explanation). While studies have investigated the use of religious stimuli, albeit in advertising and Christian symbols (e.g., Dotson & Hyatt 2000; Taylor, Halstead & Haynes 2010) none have examined how much consumers may be willing to pay for this attribute. Previous studies in labelling use a common approach, that is by asking consumers their WTP a higher price for purchasing a product with a specific attribute (e.g., Arrow & Solow 1993). This study, however, has incorporated different levels of price in the experiment to investigate consumers' actual choice and preference. WTP analysis is used in measuring the importance of product attributes in some other studies (Louviere & Islam 2008). Borrowing this technique from such studies, this research used a price range (high and low price) in the design and then analysed how much respondents might be willing to pay for the use of religious symbol on product packaging. In this way, the study showed the monetary value of putting a religious symbol on a product's packaging (also discussed in later section: managerial contributions). In short, this method allowed for calculating the higher price consumers are willing to pay for a religious symbol on a product's package, which serves as a proxy to reveal the value of adding a religious symbol.

8.4 Managerial contributions

Researchers stress that developing marketing strategies without considering the role of religion may have detrimental effects for marketers (Swimberghe, Sharma & Flurry 2009), and may even adversely affect the quality of consumer life (Kale 2004). As mentioned, past research on the influence of religion on consumer behaviour is mainly at macro level (Kale 2004; McKee 2005) and offers conceptual

and measurement contributions (Vitell & Paolillo 2003) instead of practical and managerial implications. Consumer knowledge to the marketers that a particular religious group purchases a company's products and services would allow them to match their offerings and communications with that consumer group's values and minimise the risk of offending those valuable customers. Moreover, greater understanding of religion's influence on consumer behaviour, specifically in marketing communications, will allow marketers to develop marketing communication strategies based on religious affiliation. In particular, findings from this study show that religion plays a vital role in Muslims' lives. Marketing communication aimed at Muslim consumers should take into account the fact that products should be positioned in a way that is suitable for Muslim consumers.

This study makes important managerial and practical contributions and offers organisational implications. Overall, the findings from this thesis show that the presence of religious symbols on product packaging positively influences consumers' choice, as well as their rating of the product. This finding then allows managers to determine when and how to use religious cues on packaging designs in order to enhance consumer preferences. Hence, this knowledge is particularly useful for marketers operating in multiple Muslim markets. While this influence appears particularly pertinent to Muslims consumers, it is unsurprising that religion governs all aspects of followers' lives, including product consumption. In this way, the results of this study may provide an opportunity for marketers to develop strategies on how to serve this single bond, particularly through the use of religious cues in product packaging.

Therefore, given the potential market size of the Islamic world, an applied implication gleaned from this study is for managers dealing with or considering international markets, to recognise the importance of religious symbols on packaging designs. The potentially vast Muslim consumers market holds considerable interests for marketers. With more than 1.6 billion followers around the globe (Pew Forum 2011), Muslim consumers have been referred to as the 'third billion' after China and India (Chen 2010). Even for Pakistan in this study's context, most of the products are mandated to be suitable for Muslim consumption, even if the products are imported. Hence, Pakistani consumers do not need to worry about consuming improper products. Yet the presence of a religious symbol appears to reinforce the suitability of and preference for the products for their consumption. Contrastingly,

Malaysian consumers' prefer and encourage the use of religious symbols as they create a positive attitude towards the use of religious symbols as they endorse their heightened attention and search for such labels on packaging. Similarly, in line with general research into the importance and impact of social identity on consumer behaviour (e.g., Champniss, Wilson & Macdonald 2015), this thesis endorses the importance of social identity for Muslim consumers which marketers should take into account. .

From an Islamic perspective, selling products to consumers is holistic, in that its benefits to society are considered alongside individuals' needs and satisfaction. For consumers, this means that the perceived symbolic value of goods to society, as well as the social impact of the goods, is constantly scrutinised and evaluated. This study identifies the symbols associated with Islam and the products of high and low symbolic value for Muslim consumers. By identifying, the range of symbolic values derived by Muslim consumers by purchasing or consuming the products, this study offers some concrete evidence about the influence that religious symbols can have on consumer choices.

Past research in developing branding strategies suggests that brands should focus either on the functional or symbolic benefits of the brand (Park, Jaworski & Maclnnis 1986). Park et al.(1986) advise managers to develop and consistently communicate a specific 'brand concept' and that a brand should be strictly identified as functional or symbolic. According to the authors' framework, consumers should be able to clearly associate a particular brand to functional benefits or symbolic benefits of a product. In favour of this argument, Park, Milberg & Lawson (1991), assumed the brand concept to be functional and prestigious (not symbolic) and showed that consumers reacted more favourably to functional extensions of functional brands than prestigious extensions of functional brands. However, according to the findings of this thesis, this would not be a good strategy when dealing with Muslim consumers, as Muslim consumers also derive symbolic meaning from functional products. Marketing communication strategies in Muslim countries should then highlight both functional and symbolic attributes of products. This is quite consistent with recent studies that question the notion of developing a unique brand concept and specific brand associations (e.g., Keller, Sternthal & Tybout 2002; Romaniuk & Gaillard 2007). For example, Romaniuk and Gaillard (2007) tested eight categories across 94 brands and found that a unique association

of a brand was neither related positively to past usage nor it was related positively to strong brand preference. Therefore, the authors recommend a greater number of associations for better performance.

In addition, this study establishes that visual cues are more powerful compared to verbal cues on a product's package. The verbal cues just communicate the objective information about the product and provide less scope for self-identity and self-portrayal. This is an important finding for marketers and package designers who want to opt for different cues. The choice of cues on product packaging is very important, as the findings advise marketers that there is no cultural harm if the brand name or other information, like the price of the product, is communicated in English in Muslim countries. Instead, it can actually save the organisation money by designing a simple package in one language that is suited to a foreign country. However, this can be attributed to the nature of verbal cues on product packaging. As mentioned, packaging is processed differently from advertising and the information on product packaging is objective. This study investigated simple verbal cues (later discussed in limitations) and the verbal cues, which can have stronger cultural connotations, may have some different influence.

Another important contribution is the findings about the respondents' WTP for a religious symbol on product packaging. Past research mostly offers the general influence of some marketing stimuli in marketing communications, whereas this study offers the monetary value for marketers for what they can get back by inserting a religious symbol on a product's packaging. Practitioners are particularly interested in setting or changing the price of a product when, for example, there is a change in packaging. Managers can easily calculate the financial costs involved in designing or changing a product packaging by performing a general cost analysis that may help in estimating cost benefit analyses after measuring WTP. The WTP analysis calculated how much consumers would pay for a product package with a religious symbol, in addition to a product package without a religious symbol. From the results, marketers are then able to see if the addition of a religious symbol would be beneficial in terms of immediate return on investment or not. However, this will provide an insight into the short-term, and not into the long-term activity or other psychological understanding of the consumers.

The results also suggest that the influence of visual cues is attributable to product type and the religiosity of respondents. Marketers need to consider the type of product, high symbolic value and low symbolic value, and determine who the targeted demographic is for that particular product. From the findings, individuals with high intrinsic religiosity would respond positively to the use of religious symbols on a product of high symbolic value. On the other hand, individuals with high extrinsic religiosity will respond to such use on low symbolic value products. Hence, this gives an understanding to marketers on how and when to employ visual cues on product packaging.

The study is an important step towards the understanding of Muslim consumers and provides guidance to the international marketers on how to attract Muslim consumers. Organisations like McDonald's use religious themes in their advertisements (see Figure 8.3) It is also noteworthy, that in line with the study's findings, Coca-Cola has recently changed its packaging in Indonesia as a result of its discussion with religious scholars (see Figure 8.4) (Muhamad & Mizerski 2013, , p. 368). Interestingly, as depicted in the package, the symbol is also similar, as tested in this study.



Figure 8.3 McDonald's advertisement in Pakistan (2014)



Figure 8.4 Coca-Cola's package in Indonesia depicts Islamic symbols, the Crescent and star

8.5 Limitations and future research

Overall, the external validity of this research is well supported by the consistency of the results with past studies in this area. Similarly, the inconsistencies in this study are adequately explained and reasoned by referring to previous relevant literature. However, it is important to note that this first endeavour to study Muslim consumer behaviour and attitudes is not without some limitations. Along with providing important implications for exporters and international marketers, the study offers a number of potential research avenues for future research.

Due to the nature of the sample, the findings from this study are only generalisable to Muslim consumers. Both samples were from Muslim majority geographical areas (Malaysia and Pakistan), where the majority of the population

share the same values. Literature suggests that people behave differently when they are in a minority situation compared to when they are in a majority situation. Researchers have examined different religious groups in these two situations. For example, Bailey and Sood (1993) investigated the shopping orientation of US consumers from six religious groups by comparing those from a minority religion (Buddhism, Hinduism and Islam) versus those from a majority religious group (Judaism, Catholic and Protestant). The findings revealed that while there were no significant differences in shopping orientation among majority-religion consumers, there were significant differences among minority religion consumers. In fact, in a minority situation, consumers may perceive a danger to their religious identity and thus become more attentive to and more devout followers of their religious teachings. This study found that Muslims were more attentive to the use of religious symbols on packaging in a somewhat diverse culture (Malaysia), as there are chances that products may not be suitable for Muslim consumption. Thus, this influence may even be greater in countries where Muslims are in a minority, as there are even more chances of products not being suitable for Muslim consumption. More diverse cultural respondents may provide greater insights into the effects of religious symbols by segregating the common culture and ethnocentric effects. Muslims generally follow their religious teachings even in the western countires. For example, a study found Muslims in Belgium were found to be influenced by religion and follow complex motivations to make purchase decisions compared to their western counterparts (Bonne & Verbeke 2008). Therefore, future researchers should continue this stream of research by conducting studies in countries where Muslims are in a minority situation (e.g., Australia).

This study investigated Muslim consumers only; however, past research established that consumer behaviour might differ according to the different religious affiliation of consumers. To explore the effects of religious factors on perceived risk involved in purchase decisions, Delener (1990) investigated the role of religious affiliation. In this comparative study of Catholics and Jews, the findings suggested that Catholics were more likely to be sensitive to any potentially negative consequences of their automobile and microwave oven purchase decisions, compared to Jews. Similarly, Esso and Dibb (2004) examined the purchase choices of three religious groups (Catholics, Hindus and Muslims) and found that religious adherence significantly influenced their choices. The difference in behaviours, the

authors contended, was underpinned and consistent with the beliefs of consumers' religions. These studies established that religious affiliation is an important determinant of consumer behaviour. Thus, this study should be replicated with other religious groups.

Another important research stream in consumer behaviour is to investigate the impact of ethnocentrism on consumer preferences. For example, Hsu and Nien (2008, , p. 446) showed, 'ethnocentrism has a strong influence on preferences of domestic brands'. Moreover, Wong, Polonsky and Garma (2008) also discovered that consumers who have low levels of ethnocentrism are likely to prefer foreign over domestic goods. While this study tested religiosity and other consumer demographics, future research may investigate the moderating influence of ethnocentric tendencies, like patriotism and political environment and other important antecedents of ethnocentrism (Shankarmahesh 2006).

Prior research has also demonstrated the differential effects of country of origin and local versus foreign products (Melnyk, Klein & Völckner 2012; Sheth 2011). An interesting future research avenue could be to understand and compare consumer responses to the use of religious symbolic cues with foreign versus local brands. Local companies can benefit from this future research stream, as they are able to gain a better understanding of the importance of local symbolic cues and their appropriate use. On the other hand, religious symbolic cues can be more effective for foreign brands as they may need to soften their image, in particular for ethnocentric consumers. A wise use of religious symbolic cues by foreign brands can depict their indulgence and care for local norms. As discussed in the example of Coca-Cola (see Figure 8.3), the company used religious symbols in Indonesia to portray positive associations and attract Muslim consumers.

Researchers have contended that some symbols may be more sacred than others (Taylor, Halstead & Haynes 2010), and that this study only applied one symbol (the Crescent). Future studies should compare the efficacy of different symbols in marketing communication. Similarly, verbal cues used in this study may be considered a limitation of this study. The study employed the symbols based on the pre-test and thus the respondents identified symbols that were associated with Islam. On the other hand, the verbal cues used in this study are language-based. Language associations are established in the literature, though the literature review

justifies the use of these verbal cues (lingual) to have symbolic value. Hence, future research may use some stronger verbal cues.

Finally, the instrument employed for this study was a self-reporting survey. Studies should attempt to track actual purchase behaviour and/or use physio-psychological methods, such as skin conduciveness, to overcome the limitations of self-reporting.

In conclusion, against a backdrop of growth and potential in developing Islamic consumer markets, this research attempts to guide the marketing community in developing effective marketing communication, particularly package design, to target these markets. This thesis shows empirically that product packaging is an important attribute that influences Muslim consumers by providing the consumers with the means to self-identity and portray the identity to others. As the allocation of financial resources is diverting from traditional advertising vehicles, marketing practitioners could take advantage of the communicative power of product packaging to market their product at point of purchase. In doing so, this thesis highlights consumption as a social activity that affects, and is affected by, self and others in the society. This social phenomenon is even more profound and relevant when one considers how Muslims' ways of life, including their consumer behaviour, are governed by their religion. Indeed, this governance occurs to the extent that Muslim consumer behaviour may run contrary to the conventional economic assumption of a global consumer culture. Further, departing from the conventional view that attitudes can predict behaviour, this thesis shows evidence for discrepancy between attitudes and behaviour where consumers significantly differ in their preference for one product package to another product package but did not hold significant differences in their attitudes towards both type of packages. DCEs and the choice modelling techniques enabled the determination of such differences. Similarly, this research established the enduring nature of attitudes stemming from memory of the consumers. While this is consistent with the functional theory of attitudes, this contradicts with the constructive view of attitudes. These words, it seems, are a fitting conclusion to this thesis and a stark reminder to academics and managers the importance of religion and symbolic cues for different product categories.

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