

IMPACTS OF INTRINSIC MOTIVATIONAL FACTORS AND ATTITUDE ON  
HALAL FOOD PURCHASE INTENTION, WITH THE COUNTRY OF ORIGIN  
AS THE MODERATOR IN PAKISTAN

SUMERA SYED

UNIVERSITI TEKNOLOGI MALAYSIA

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SUMERA SYED

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requirements for the award of the degree of  
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## **DEDICATION**

This thesis is dedicated to my husband, my parents, and children for their all-time support and unconditional love throughout the many stages of this challenging and rewarding journey

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All the praise goes humbly to ‘The One’ who created the livings and those on whom the best of the creation, the humans command. ‘The One’ who bestowed the knowledge upon some to benefit the needy ones, and blessed some to cheer up the lives of the deserving ones. ‘The One’ who empowered me to undertake the challenging, yet most enthralling paths to follow.

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## ABSTRACT

The demand for halal food products has significantly increased during the last two decades. However, so far, the research being done in this area is absolutely not a match for the rising halal food consumption trends. Especially in Pakistan, which is the second-largest Muslim country, halal food studies are exiguous as compared to its other Muslim counterparts. Due to cultural and religious conventions, Pakistanis are perceived to consume only halal food. However, multiple news sources report that a considerable number of consumers have been consuming non-halal food and beverages, either voluntarily or due to a lack of awareness. Moreover, many recent halal food adulteration scandals in Pakistan underscore the need to re-examine the attitude of Pakistani consumers towards halal food purchase intention. Furthermore, globalization, a rise in incomes, and the lack of trust in local food have reportedly resulted in a rise in the demand for imported food products, prompting consideration of the role of the country of origin when making halal food purchase intention. This situation and a significant dearth of empirical studies call into question the intrinsic motivation of Pakistani consumers to use halal food products. In this vein, the primary purpose of this study is to bridge the gap while using a new approach of organismic meta-theory, namely “Self-Determination Theory (SDT),” which deals mainly with intrinsic motivation. Specifically, the present research investigates the influence of the needs for autonomy, competence, and relatedness on halal food purchase intention, which are fundamental pillars of intrinsic motivation. Furthermore, the study analyses the influence of attitude on halal food purchase intention by using the Theory of Reasoned Action. The moderating role of the country of origin in determining halal food purchase intention has also been investigated. Using non-probability convenience sampling, a total of 308 usable data was obtained through an online survey. The data was analysed using the Partial Least Squares-Structural Equation Modeling approach. The results revealed that competence, relatedness, and attitude positively influenced halal food purchase intention. However, the findings discovered that autonomy did not influence halal food purchase intention. Besides, the moderating role of the country of origin was also not significant. The study has contributed to halal food purchase knowledge by analysing—the impact of the three basic psychological needs of autonomy, competence, and relatedness for the first time besides employing Self-Determination Theory to understand intrinsic motivational factors affecting halal food purchase intention. Moreover, the results of the study have set a course of direction for organizations to devise their advertising and marketing strategies accordingly. From a policy-making perspective, these findings provide insight for the government to understand the importance of halal food among Pakistani consumers and further strengthen the efficient operation of the Pakistan Halal Food Authority (PHFA), which is responsible for the regulation of authentic halal food products.

## ABSTRAK

Permintaan terhadap produk makanan halal telah meningkat dengan ketara dalam tempoh dua dekad yang lalu. Walau bagaimanapun, setakat ini, penyelidikan yang dilakukan di bidang ini tidak setimpal dengan perkembangan penggunaan makanan halal yang semakin meningkat. Terutamanya di Pakistan, yang merupakan negara Islam kedua terbesar, kajian makanan halal adalah jelas berbanding rakan negara Islam yang lain. Rakyat Pakistan dianggap hanya mengambil makanan halal disebabkan konvensyen budaya dan agama. Walau bagaimanapun, beberapa sumber berita melaporkan bahawa sebilangan besar pengguna menggunakan makanan dan minuman tidak halal, sama ada secara sukarela atau disebabkan oleh kekurangan kesedaran. Selain itu, banyak skandal pemalsuan makanan halal baru-baru ini di Pakistan menekankan keperluan untuk mengkaji semula sikap pengguna Pakistan terhadap niat membeli makanan halal. Tambahan pula, globalisasi, peningkatan pendapatan, dan kurangnya kepercayaan terhadap makanan tempatan telah mengakibatkan peningkatan dalam permintaan terhadap produk makanan import, yang mendorong pertimbangan peranan negara asal apabila membuat niat membeli makanan halal. Keadaan ini dan kekurangan kajian empirikal yang ketara mempersoalkan motivasi intrinsik pengguna Pakistan untuk menggunakan produk makanan halal. Maka, tujuan utama kajian ini adalah untuk merapatkan jurang ini dengan menggunakan pendekatan baru teori meta-organisma, iaitu *Self-Determination Theory* yang membincangkan motivasi intrinsik. Secara khususnya, penyelidikan ini menyiasat pengaruh keperluan autonomi, kecekapan, dan perkaitan ke atas niat membeli makanan halal, yang menjadi tonggak asas motivasi intrinsik. Seterusnya, kajian ini juga menganalisis pengaruh sikap terhadap niat membeli makanan halal dengan menggunakan *Theory of Reasoned Action*. Selain itu, peranan penyederhanaan negara asal dalam menentukan niat pembelian makanan halal telah disiasat. Menggunakan pensampelan mudah bukan kebarangkalian, sejumlah 308 data boleh guna diperoleh melalui tinjauan dalam talian. Data ini telah dianalisis menggunakan pendekatan *Partial Least Squares-Structural Equation Modeling*. Hasil kajian menunjukkan bahawa kecekapan, perkaitan dan sikap secara positif mempengaruhi niat membeli makanan halal. Walau bagaimanapun, penemuan mendapati bahawa autonomi tidak mempunyai pengaruh ke atas niat membeli makanan halal. Selain itu, peranan penyederhanaan negara asal juga tidak signifikan. Kajian ini telah menyumbang kepada pengetahuan tentang pembelian makanan halal dengan menggunakan kesan tiga keperluan asas psikologi iaitu autonomi, kecekapan dan perkaitan terhadap niat membeli makanan halal yang telah dikaji buat kali pertama selain menggunakan *Self-Determination Theory* untuk memahami faktor motivasi intrinsik yang mempengaruhi niat membeli makanan halal. Hasil kajian menetapkan hala tuju kepada organisasi untuk merangka strategi pengiklanan dan pemasaran mereka dengan sewajarnya. Dari perspektif penggubalan dasar, penemuan ini memberi wawasan kepada kerajaan untuk memahami kepentingan makanan halal dalam kalangan pengguna Pakistan dan seterusnya mengukuhkan operasi cekap Pihak Berkuasa Makanan Halal Pakistan (PHFA) yang bertanggungjawab terhadap peraturan berkaitan produk makanan halal yang tulen.

## TABLE OF CONTENTS

	TITLE	PAGE
	<b>DECLARATION</b>	<b>ii</b>
	<b>DEDICATION</b>	<b>iii</b>
	<b>ACKNOWLEDGEMENT</b>	<b>iv</b>
	<b>ABSTRACT</b>	<b>v</b>
	<b>ABSTRAK</b>	<b>vi</b>
	<b>TABLE OF CONTENTS</b>	<b>vii</b>
	<b>LIST OF TABLES</b>	<b>xi</b>
	<b>LIST OF FIGURES</b>	<b>xiii</b>
	<b>LIST OF ABBREVIATIONS</b>	<b>xiv</b>
	<b>LIST OF SYMBOLS</b>	<b>xv</b>
	<b>LIST OF APPENDICES</b>	<b>xvi</b>
<b>CHAPTER 1</b>	<b>INTRODUCTION</b>	<b>1</b>
1.1	Overview	1
1.2	Background of the Study	1
1.3	Problem Statement	8
1.4	Research Questions	10
1.5	Research Objectives	11
1.6	Research Significance	11
1.7	Research Scope	13
1.8	Operational Definition of Terms	14
1.9	Organization of the Study	16
1.10	Summary	18
<b>CHAPTER 2</b>	<b>LITERATURE REVIEW</b>	<b>19</b>
2.1	Introduction	19
2.2	The Concept of Halal	19
2.3	The Continuously Growing Halal Food Market	20
2.4	The Scope of Halal Food in Pakistan	22

2.5	Theoretical Background	28
2.5.1	Self-Determination Theory	29
2.5.2	Theory of Reasoned Action	35
2.6	Literature Review regarding Research Constructs	37
2.6.1	Halal Food Purchase Intention	37
2.6.2	Intrinsic Motivational Factors	44
2.6.2.1	Autonomy	45
2.6.2.2	Competence	48
2.6.2.3	Relatedness	50
2.6.3	Attitude	52
2.6.4	The Moderating Role of Country of Origin	55
2.7	Conceptual Framework	59
2.8	Summary	62
<b>CHAPTER 3</b>	<b>RESEARCH METHODOLOGY</b>	<b>63</b>
3.1	Introduction	63
3.2	Research Paradigm	63
3.3	Research Approach	66
3.4	Research Design	67
3.4.1	Purpose of Study	67
3.4.2	Type of Investigation	68
3.4.3	Interference by Researcher	68
3.4.4	Study Setting	69
3.4.5	Unit of Analysis	70
3.4.6	Time Horizon	70
3.5	Variables and Measures	71
3.6	Sampling Design	71
3.6.1	Target Population	72
3.6.2	Sample Size	73
3.6.2.1	Sample Size using Gpower	73
3.6.2.2	Hair's 10 Times Rule Method	74
3.6.2.3	Roscoe's Rule of Thumb	75
3.6.2.4	Sample-to-Item Ratio	75



3.6.2.5	Sample-to-Variable Ratio	75
3.6.3	Sampling Method	76
3.7	Data Collection Procedure	77
3.8	Questionnaire Design	78
3.9	Instrument Development	79
3.9.1	Content Validity	79
3.9.2	Pilot Study	87
3.9.3	Exploratory Factor Analysis	87
3.9.3.1	EFA of Exogenous Variables	88
3.9.3.2	EFA of Endogenous Variable	90
3.9.4	Reliability Analysis	91
3.10	Data Analysis Procedure	93
3.10.1	Data Preparation	93
3.10.2	Structural Equation Modeling (SEM)	93
3.10.2.1	Partial Least Squares SEM (PLS-SEM)	95
3.11	Summary	98
<b>CHAPTER 4</b>	<b>DATA ANALYSIS AND FINDINGS</b>	<b>101</b>
4.1	Introduction	101
4.2	Response Rate	101
4.3	Missing Data Analysis	102
4.4	Straight Lining	103
4.5	Outlier Detection	103
4.6	Normality Test	104
4.7	Common Method Bias	105
4.8	Descriptive Statistics of Respondents	106
4.9	Descriptive Statistics of Instrument	109
4.10	Measurement (Outer) Model Evaluation	111
4.10.1	Internal Consistency Reliability	111
4.10.2	Indicator Reliability	112
4.10.3	Convergent Validity	113
4.10.4	Discriminant Validity	114
4.11	Structural (Inner) Model Evaluation	120

4.11.1	Assessment of Collinearity	120
4.11.2	Path Coefficients	121
4.11.3	Coefficient of Determination ( $R^2$ )	123
4.11.4	Effect Size $f^2$	123
4.11.5	Predictive Relevance $Q^2$	124
4.12	Moderation Analysis (Country of Origin)	126
4.13	Results of Hypotheses Testing	130
4.14	Summary	131
<b>CHAPTER 5</b>	<b>DISCUSSION AND CONCLUSION</b>	<b>133</b>
5.1	Introduction	133
5.2	Encapsulation of Research Findings	133
5.3	Discussion of Research Findings	135
5.3.1	Research Objective 1: The Influence of Intrinsic Motivational Factors on Halal Food Purchase Intention	135
5.3.2	Research Objective 2: The Influence of Attitude on Halal Food Purchase Intention	140
5.3.3	Research Objective 3: To Measure the Moderating Impact of Country of Origin on the Relationship Between Intrinsic Motivational Factors and Consumers' Purchase Intention of Halal Food Products	141
5.3.4	Research Objective 3: To Measure the Moderating Impact of Country of Origin on the Relationship Between Intrinsic Motivational Factors and Consumers' Purchase Intention of Halal Food Products	142
5.4	Research Contributions	145
5.4.1	Theoretical Contributions	145
5.4.2	Practical Contributions	146
5.5	Limitations of the Study	149
5.6	Recommendations for Future Research	150
5.7	Summary	152
<b>REFERENCES</b>		<b>153</b>
<b>LIST OF PUBLICATIONS</b>		<b>231</b>

## LIST OF TABLES

TABLE NO.	TITLE	PAGE
Table 2.1	A review of empirical Halal food studies in Pakistan	24
Table 2.2	A review of theories used in the past studies to determine factors influencing Halal food purchase intention	38
Table 2.3	Definitions of attitude	52
Table 3.1	Difference between positivist, interpretivist and pragmatic paradigm	65
Table 3.2	Summary of initial and revised items after content validity	81
Table 3.3	EFA results of exogenous variables	89
Table 3.4	EFA results of endogenous variable	90
Table 3.5	Finalized items with the results of reliability analysis	91
Table 3.6	Measurement model assessment criteria for reflective measures	96
Table 3.7	Structural model evaluation criteria	97
Table 4.1	The demographic characteristics of the respondents	108
Table 4.2	Descriptive statistics for measurement items	110
Table 4.3	Internal consistency reliability	112
Table 4.4	Indicator reliability	113
Table 4.5	Average variance extracted (AVE)	114
Table 4.6	Cross loadings	115
Table 4.7	Fornell-Larcker criterion	117
Table 4.8	HTMT criterion	119
Table 4.9	Multicollinearity assessment	120
Table 4.10	Path coefficients	122
Table 4.11	Effect size	124
Table 4.12	Results of moderation analysis	129

Table 4.13	Comprehensive results of hypotheses testing	130
Table 5.1	Summary of research questions, hypotheses, and findings	134

## LIST OF FIGURES

<b>FIGURE NO.</b>	<b>TITLE</b>	<b>PAGE</b>
Figure 1.1	Global halal food market	2
Figure 1.2	Global halal market share	3
Figure 1.3	Percentage of monthly consumption expenditure by commodity groups	4
Figure 1.4	Organization of the study	17
Figure 2.1	The self-determination continuum	31
Figure 2.2	The theory of reasoned action (TRA)	36
Figure 2.3	The conceptual framework	61
Figure 3.1	Calculation of sample size using G-Power	74
Figure 3.2	Reflective and formative measurement model	96
Figure 4.1	Path coefficients between constructs	122
Figure 4.2	Predictive relevance of model	125
Figure 4.3	Main effect model	127
Figure 4.4	Full model with the inclusion of interaction terms	128

## LIST OF ABBREVIATIONS

AVE	-	Average Variance Extracted
CB-SEM	-	Covariance Based Structural Equation Modelling
COO	-	Country of Origin
EFA	-	Exploratory Factor Analysis
KMO	-	Kaiser-Meyer-Olkin
PIA	-	Product Indicator Approach
PLS	-	Partial Least Square
SDT	-	Self-determination Theory
SEM	-	Structural Equation Modelling
SPSS	-	Statistical Package for Social Science
TRA	-	Theory of Reasoned Action
TPB	-	Theory of Planned Behaviour
VIF	-	Variance Inflation Factor

## LIST OF SYMBOLS

$\beta$	-	Beta Coefficients
$R^2$	-	Coefficients of Determination
$f^2$	-	Effect Size
$Q^2$	-	Predictive Relevance
$p$	-	Probability Value
$t$	-	$t$ -test Value

## LIST OF APPENDICES

<b>APPENDIX</b>	<b>TITLE</b>	<b>PAGE</b>
Appendix A	Research Questionnaire	185
Appendix B	Template Used for Content Validation	191
Appendix C	Data Analysis for Pilot Study	197
Appendix D	Descriptive Analysis (Actual Study)	207
Appendix E	Harman's Single Factor Test (Common Method Variance / Bias)	214
Appendix F	SmartPLS Results (Measurement Model)	216
Appendix G	SmartPLS Results (Structural Model)	223
Appendix H	SmartPLS Results (Moderation Analysis)	226



# CHAPTER 1

## INTRODUCTION

### 1.1 Overview

The first chapter focuses on the importance of conducting research on the halal food industry. Then, the gaps in the literature have been addressed in the problem statement, which vindicates the significance of carrying out the present study. Thereafter, research questions and research objectives have been illustrated. Subsequently, research significance has been discussed, which is followed by a short debate on research scope. The discussion then leads to a brief definition of the terms used in the study. Finally, the organization of the thesis has been described.

### 1.2 Background of the Study

The global population consists of 1.94 billion Muslims, contributing to around one-fourth of the world population (Schleifer et al., 2022). According to Pew Research Center studies, Muslims are expected to outnumber Christians by the year 2060, with the number of Muslims reaching approximately 3 billion (Diamant, 2019). The growing Muslim population has a highly influential impact on international business. According to the State of the Global Islamic Economy Report 2022 by Zawya (2022), Muslim consumers' spendings in 2021 accounted for more than \$2 trillion worldwide. Nevertheless, with an enormous increase in Muslims' purchasing power, the businesses catering to Muslims are enjoying considerable growth in revenues. The global halal food industry, in particular, is expected to gain a market worth of approximately US\$ 3,907.7 billion by 2027, up from US\$ 1,978 billion in 2021, representing an annual growth rate of 11.24% (Research and

Markets, 2022). Figure 1.1 reveals that halal meat, poultry, and seafood hold the biggest share of the global halal food industry, followed by dairy products. In addition, fruits and vegetables, cereals and grains, oils, fats, and waxes, and confectionery are the most significant products contributing to the global halal food market.

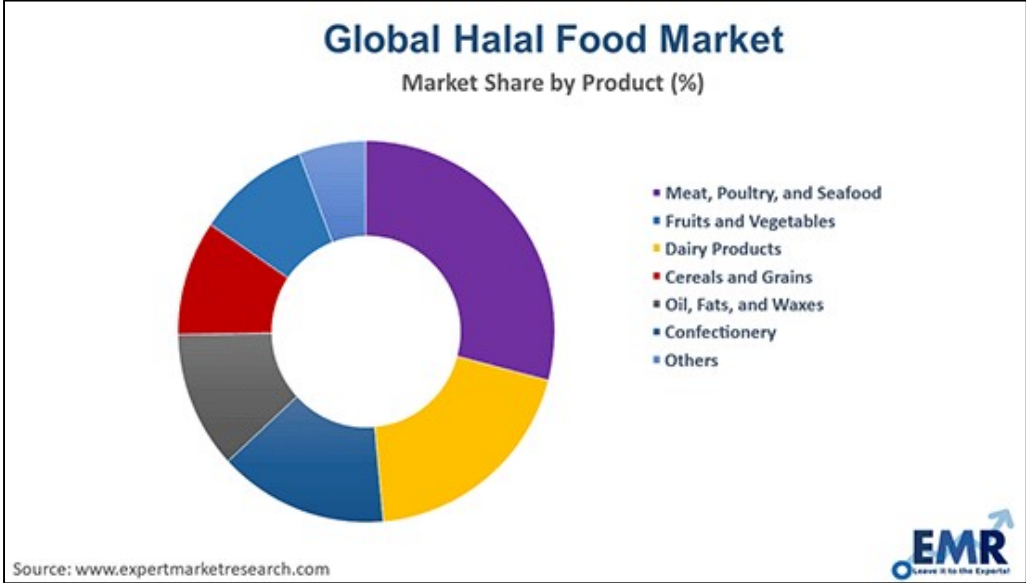


Figure 1.1 Global halal food market (Expert Market Research, 2022)

As the global halal food market has been growing, Asia Pacific has been identified as the largest region contributing to the world halal food industry's growth (Figure 1.2), with a large consumer base residing in Pakistan, Indonesia, Bangladesh, and India (Markets and Markets, 2019). However, the past research on halal food reveals a lack of studies on halal food in a Pakistani context, which is the second largest nation inhabited by a Muslim population after Indonesia.

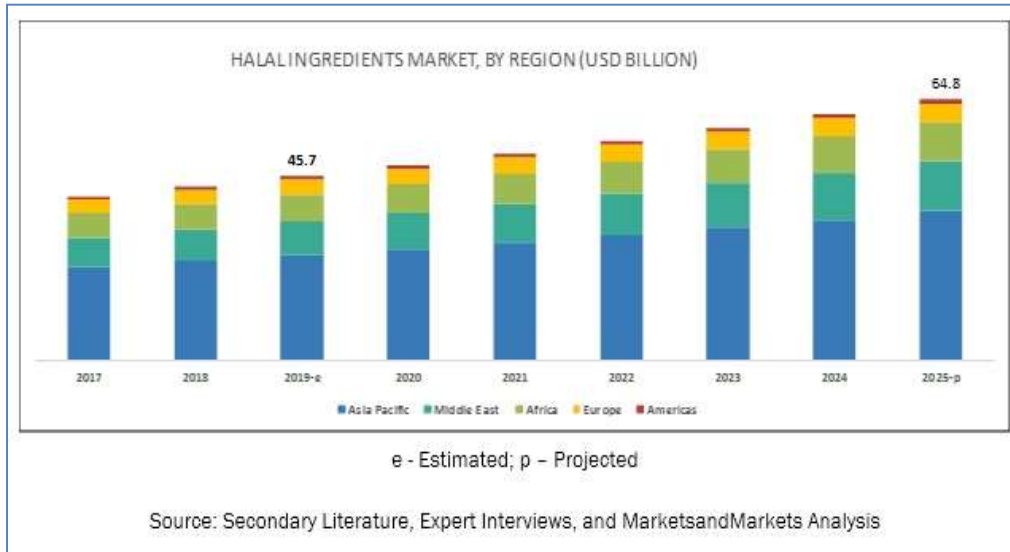


Figure 1.2 Global halal market share (Markets and Markets, 2019)

Around 96.5% of the population of Pakistan consists of Muslims, contributing to approximately 11% of the total global Muslim population and accounting for a significant proportion of the global halal industry (Countrymeters, 2022). According to a report issued in 2020 by the Board of Investment (BOI), the food and beverage industry is the second main contributor to Pakistan’s national economy after textiles, adding up to 27% of value-added products and 16% of employment in the country. Though the data shared by the Pakistan Bureau of Statistics (2020) indicates a slight decline in an individual’s monthly expenditure on food consumption from 37.05% in the year 2015-16 to 36.05% in the year 2018-19, the spending for the food and non-alcoholic beverages group was significantly higher in comparison with other commodities (Figure 1.3). In addition, the monthly spending on hotels and restaurants was found to be 6.35% for the period 2018-19 as compared to 6.18% during the year 2015-16, indicating an increase in Pakistani consumers' propensity to dine out. Hence, it is gathered that food holds the utmost importance for Pakistani individuals among all the commodities, both in rural and urban areas of the country.

Nonetheless, the expenditure on alcoholic beverages and tobacco was found to be 0.97% of the monthly income, which is the lowest spending commodity of all. Although the use of alcohol has been legally outlawed for Muslims in Pakistan since

1977 and one may assume that the alcohol consumption figures may largely pertain to non-Muslim consumers in Pakistan, many news sources demonstrate that this is not the case. Despite the prohibition, a few large hotels across the nation and a few wine shops in Sindh province, particularly in the country's largest metropolis, Karachi, have licenses to sell alcoholic beverages to non-Muslims (Bari, 2021). However, only non-Muslims are sold alcohol, despite the fact that 90% of buyers are actually Muslims, mostly belonging to the elite and upper middle class (Zafar, 2014).

COMMODITY GROUPS	2015-16			2018-19		
	URBAN	RURAL	TOTAL	URBAN	RURAL	TOTAL
Food & Non Alcoholic Beverages	31.25	42.13	37.05	30.64	41.13	36.05
Alcoholic Beverages, Tobacco	0.88	1.32	1.11	0.81	1.13	0.97
Clothing and Foot Wear	8.23	9.78	9.05	6.85	8.14	7.52
Housing, Water, Electricity, Gas and Other	27.76	19.06	23.12	28.62	19.20	23.76
Furnishing, Household Equipment and Routine Maintenance of the House	2.83	2.56	2.69	3.09	3.00	3.04
Health	2.37	3.62	3.04	2.63	3.78	3.22
Transport	5.43	4.96	5.18	6.89	6.75	6.82
Communication	2.42	2.06	2.22	2.14	1.74	1.93
Recreation & Culture	1.78	1.42	1.59	1.06	1.31	1.19
Education	5.01	2.20	3.51	5.50	2.56	3.98
Restaurants and Hotels	6.87	5.59	6.18	6.56	6.16	6.35
Miscellaneous	5.18	5.31	5.25	5.22	5.09	5.15

Figure 1.3 Percentage of monthly consumption expenditure by commodity groups (Pakistan Bureau of Statistics, 2020)

Henceforth, the above discussion indicates that a considerable number of Pakistani Muslim consumers do not adhere to Islamic dietary rules, despite living in a highly collectivist Islamic society that expects them to act in accordance with the norms and values of that society (Bari, 2021; Salman & Siddiqui, 2011). The statistics on the use of non-halal food products demonstrate that a significant number of Pakistanis feel autonomous in their food consumption decisions and do not take societal pressures into account, despite the fact that the use of non-halal food and beverages is widely regarded as a big taboo in Pakistan (Salman & Siddiqui, 2011). However, a large number of Pakistani consumers have been found to consume non-halal food products due to a lack of awareness and knowledge about Islamic dietary rules (Shahzad, 2016). Nonetheless, Salman and Siddiqui (2011) identified that Pakistani consumers consider religion as a personal matter, and they give much more importance to intrinsic values as compared to extrinsic values when choosing halal or non-halal food products. Thus, consumers with a strong intrinsic motivation to follow religion are conscious about consuming halal only, while the consumption of non-halal food and beverages has been observed among those Pakistani Muslim

consumers who score low on intrinsic motivation to obey religious teachings. Therefore, there is a need to empirically investigate the influence of Pakistani consumers' intrinsic motivation in determining their halal food purchase intention. Although a number of studies are available on the factors determining halal food purchase intention in Pakistan, unfortunately, there is a dearth of empirical research analysing the impact of intrinsic motivation on halal food purchase intention in Pakistan.

The overview of literature reveals that the “Self-Determination Theory (SDT)” presented by Deci and Ryan (1985) is the most popular theory among researchers to understand intrinsic motivation and has been widely used by researchers in various fields to analyse intrinsically motivated behaviours. SDT posits that intrinsic motivation is basically stimulated by the satisfaction of three basic psychological needs: autonomy, competence, and relatedness (Ryan & Deci, 2017). However, past studies on halal food have mostly adopted the “Theory of Reasoned Action (TRA)” or the “Theory of Planned Behaviour (TPB)” as the underpinning theories to understand halal food purchase intention, while the use of SDT to explore the phenomenon of halal food purchase intention is not commonly witnessed (Syed, Shah, & Ahmad, 2021). Therefore, the present study endeavours to unravel the impact of intrinsic motivation on halal food purchase intention by analysing the influence of autonomy, competence, and relatedness on halal food purchase intention.

Furthermore, most of the previous studies deploying TRA or TPB have found attitude as a strong predictor of halal food purchase intention (Afendi, Azizan, & Darami, 2014; Alam & Sayuti, 2011; Astuti & Asih, 2021; Pradana, Huertas-García, & Marimon, 2020; Rahim et al., 2021; Suleman, Sibghatullah, & Azam, 2021; Syed, Ahmad, & Shah, 2022; Vizano, Khamaludin, & Fahlevi, 2021). However, a study performed by Ansawi, Sukoco, and Fanani (2018) in Indonesia on international Muslim students assessed that attitude is not a determinant of purchase intention for the halal food items served in international chain restaurants. Similar results were obtained by Jannat and Islam (2019) in an empirical study conducted on Bangladeshi Muslim consumers. They found that the purchase intention of halal-certified food

products is not affected by the consumer's attitude. The contradictory studies drive the urge to re-examine the role of attitude in determining halal food purchase intention.

Nonetheless, because Pakistan is a Muslim country, it is widely assumed that all food products available in the country are halal and Shariah-compliant (Sherwani et al., 2018). However, a few prominent scandals and unethical practices prevailing in the food and beverage industry of Pakistan have put a question mark on the integrity and authenticity of locally produced food products, which are commonly assumed to be halal, safe, and clean, and trusted by Pakistani consumers. Ali et al. (2018) emphasized the need to assess the effect of scandals on consumers' halal food purchase intention and identified an insignificant relationship between attitude and consumers' halal food purchase intention after the Cadbury scandal in Malaysia. Henceforth, they suggest performing an empirical analysis to identify the potential change in consumers' attitude towards halal food, especially in societies that have been prone to halal food scandals in recent years. Although a significant number of studies have demonstrated the positive effect of attitude on halal food purchase intention in Pakistan (Ali & Khushi, 2017; Salman & Siddiqui, 2011; Suleman et al., 2021; Syed et al., 2022), the study conducted by Salman & Siddiqui (2011) was carried out quite a few years before the first prominent halal food scandal in 2016; while Ali & Khushi (2017) studied halal food purchase intention in Pakistan only for non-Muslim consumers. The study conducted by Suleman et al. (2021) was performed during 2019-2020 on Muslim and non-Muslim consumers residing in Pakistan as well as the USA, Canada, Australia, and Germany. Nonetheless, the most recent study by Syed et al. (2022) has witnessed a positive influence of attitude on Pakistani consumers' intention to purchase halal food. Yet the research on Pakistani consumers' intention to purchase halal food after the halal food scandals is too thin on the ground to generalize the positive relationship between attitude and halal food purchase intention. Henceforth, the afore-stated discussion stimulates the need to scrutinize again the role of Pakistani consumers' attitude in shaping their purchase intention for halal food products.

Additionally, Kaiser, Kibbe, and Arnold (2017) suggested that attitude is also a measure of intrinsic motivation; hence, it becomes more viable to include attitude in the present study, which is basically concerned with the intrinsic factors involved in building up consumers' halal food purchase intention. The present study, therefore, steps ahead to analyse the impact of consumers' attitude on halal food purchase intention in Pakistan.

Besides, rapid growth in purchasing power parity and the adulteration of domestic food products have generated a dramatic increase in the demand for imported food items in Pakistan (Knoema, 2018; Qureshi & Khan, 2018). A report issued by the Pakistan Bureau of Statistics (2018) demonstrates that food imports are growing at a faster pace than food exports, and imported food items worth \$3.2 billion have been reported for the fiscal year 2017-18. Factors like the advent of modern technological tools, globalization, social media, and education have created awareness among Pakistani consumers, and they are striving to get quality food products that also satisfy Islamic dietary requirements, no matter how much they cost or where they come from (Bukhari, 2018). Moreover, around 17 million people in Pakistan belong to the middle and upper classes, with lavish lifestyles and powerful spending patterns because of their high-income levels, which have resulted in more fastidious and choosy consumers, especially when it comes to the purchase of food items. Hence, consumers belonging to these socio-economic classes have been seen consuming imported food items because of the perception of high quality associated with imported goods. Despite the fact that Pakistan is an agricultural country with the world's fourth largest livestock population, the country imports a massive amount of food products from various countries, totalling Rs. 1.2 trillion during the fiscal years 2020-2021 (Ansari, 2021; Sohaib & Jamil, 2017). When the market is flooded with both local and foreign products, consumers have been observed to differentiate between the products either solely based on their "country of origin" (COO) or in concurrence with other product attributes (Nasution & Rossanty, 2018; Rios, Riquelme, & Abdelaziz, 2014). Henceforth, the massive import of food items by Pakistan from foreign countries emphasizes the need to assess the influence of the image of COO on Pakistani consumers' intention to buy halal food. However, there is a scarcity of research exploring the COO effect on the purchase intention of halal

food products in Pakistan. The present research endeavour, therefore, attempts to analyse the impact of COO on Pakistani consumers' halal food purchase intention.

### **1.3 Problem Statement**

The growing popularity and importance of halal food has urged social scientists to dig more deeply into the determinants and motives of halal food purchase intention. Pakistan, as a larger Muslim-populated country, accounts for a sizable portion of global halal food consumption. However, it has been noted that the empirical studies conducted in Pakistan on halal food are inadequate to properly address the intrinsic motivation involved in making halal food purchase intention. Mazhar, Bajwa, and Collins (2018), in discussing "Halal food chains-concepts and opportunities in Pakistan," pointed out the need for Pakistan to understand and ensure consumer confidence towards halal purchasing as a prerequisite for sustainable halal food trading. Consumers also require halal food to be handled with the utmost safety, cleanliness, and trustworthiness within the food supply chain process. Nonetheless, because Pakistan is a Muslim country, it is widely assumed that all food products available in the country are halal and Shariah-compliant (Sherwani et al., 2018). However, a haram beef scandal struck the country in 2016 (Ali et al., 2018). The authorities revealed that citizens were being fed with meat that failed to fulfil halal requirements, and the slaughtering practices did not adhere to Islamic rules (Shahzad, 2016). In different raids, the Punjab Food Authority (PFA) disposed of thousands of litres of impure, harmful milk and sealed 21 food points because of the use of unhygienic meat, the presence of insects on food items, and the use of dirty oil. Moreover, two trucks carrying hundreds of kilograms of sick and dead chicken were caught by the authorities, resulting in the closure of six meat shops (Hussain, 2020; Punjab Food Authority, 2021). The multiple food scandals involving the safety and veracity of food products have compelled marketing researchers to conduct more research to identify the variables influencing Pakistani customers' decision to purchase food. Nevertheless, this indicates the need for more empirical evidence on customers' perception and knowledge of halal food offerings in the market and their ability to buy them with confidence and pride. Thus, there is a



critical need to understand the intrinsic motivation or reasoning related to consumers' autonomy, competence, and relatedness as well as their attitude towards halal food based on those requirements.

Furthermore, during the past few decades, the advancements in technology have turned the world into a global village, and consumers are getting acquainted with products from all around the world through the internet and social media. Consequently, today's markets are loaded with local as well as foreign products, giving consumers a variety of products to choose from. Rising incomes, high purchasing power parity, and domestic food adulteration have accelerated the trend of purchasing imported food items, especially among the middle and upper Pakistani social classes. However, consumers have different images of different countries, which have been observed to influence their intentions to purchase different products (Rios et al., 2014). Schnettler et al. (2008) conducted a study in Chile that highlighted the importance of COO in food choice decisions, especially for beef. Nasution and Rossanty (2018) found a positive effect of COO on the purchase behaviour of imported frozen food items. In addition, they examined whether COO acts as a moderating variable between the halal label and the purchase behaviour of foreign food products. While the earlier halal food studies have embodied moderating variables such as "education level" (Wibowo et al., 2021), "halal awareness" (Vizano et al., 2021), "religiosity" (Gunawan & Gaffar, 2021), and "religious involvement" (Pradana et al., 2020), the role of COO as a moderator for halal food purchase intention has been sporadically discussed. Henceforth, it becomes vital to integrate COO as a moderating variable into the present research to analyse the role of COO in shaping the halal food purchase intention of Pakistani consumers. In addition, despite the studies providing evidence of the relationship between three basic psychological needs as well as attitude and halal food purchase intention, there are contradictory studies that show either no association or a weak association of autonomy, competence, relatedness, and attitude with purchase intention. As a result, including COO as a moderating variable may help to explain inconsistencies in previous studies.

In a nutshell, the above discussion leads to the notion that intrinsic motivation has been inadequately investigated in previous studies focusing on halal food purchase intention. Thus, there is a dire need to explore the intrinsic motivational factors influencing halal food purchase intention. Hence, the present study proposes a framework stemming from SDT to analyse the impact of autonomy, competence, and relatedness on halal food purchase intention, as these are the basic pillars of intrinsic motivation. Moreover, the assessment of consumers' attitude towards halal food becomes vital in a society that has witnessed numerous halal food scandals. In addition, the review of past literature reveals the scarcity of halal food studies measuring the role of COO as a moderator, thereby elaborating the need for further validation of the phenomenon. Hence, the study attempts to bridge the gap in the previous literature by analysing the moderating role of COO on the relationship between autonomy, competence, relatedness, attitude, and halal food purchase intention.

#### **1.4 Research Questions**

In an attempt to address the aforementioned gaps, the present study seeks to answer the following research questions:

RQ 1: To what extent do intrinsic motivational factors (consumers' autonomy, consumers' competence, and consumers' relatedness) affect consumers' purchase intention of halal food products?

RQ 2: To what extent does consumers' attitude affect their purchase intention of halal food products?

RQ 3: To what extent does country of origin moderate the relationship between intrinsic motivational factors (consumers' autonomy, consumers' competence, and consumers' relatedness) and consumers' purchase intention of halal food products?

RQ 4: To what extent does country of origin moderate the relationship between consumers' attitude and their purchase intention of halal food products?

## **1.5 Research Objectives**

Based on the previous discussion, the objectives of the study are stated as follows:

- RO 1: To examine the impact of intrinsic motivational factors (consumers' autonomy, consumers' competence, and consumers' relatedness) on consumers' purchase intention of halal food products.
- RO 2: To investigate the effect of consumers' attitude on their purchase intention of halal food products.
- RO 3: To measure the moderating impact of country of origin on the relationship between intrinsic motivational factors (consumers' autonomy, consumers' competence, and consumers' relatedness) and consumers' purchase intention of halal food products.
- RO 4: To measure the moderating impact of country of origin on the relationship between consumers' attitude and their purchase intention of halal food products.

## **1.6 Research Significance**

Despite the abundantly available halal food literature, there are still theoretical and practical gaps that are intended to be partially filled by the framework presented by this study. The following discussion highlights the significance of this study in filling these gaps:

Theoretically, this research will contribute to the body of already existing knowledge by employing SDT to understand the role of intrinsic motivation in determining consumers' purchase intention for halal food products. SDT emphasizes the satisfaction of basic psychological needs of autonomy, competence, and relatedness for the enhancement of intrinsic motivation. The majority of the previous studies regarding halal food purchase intention have used TRA or TPB, while SDT has rarely been employed in the past to analyse halal food purchase intention. Hence, to the best of the researcher's knowledge, the role of all the basic intrinsic

psychological needs of autonomy, competence, and relatedness in shaping consumers' halal food purchase intention will be examined for the first time in this study.

Secondly, this study will add to the literature on the effect of attitude on halal food purchase intention, which is especially important in a society that has been plagued by food scandals. Because very few studies have been conducted in the aftermath of the recent adulteration of halal food and beverages in Pakistan, this research endeavor will be useful in empirically determining whether Pakistani people still have a positive attitude towards purchasing halal food, even after the scandals highlighted in the media. Furthermore, there is a scarcity of research on the impact of COO on consumer halal food purchase intention; this study aims to analyse the moderating impact of COO on the relationship between intrinsic motivational factors, consumer attitude, and halal food purchase intention. Nevertheless, the study will demonstrate whether the products originating from Muslim countries enhance the intrinsic motivation of consumers and generate positive feelings towards buying halal food or not.

Moreover, this research will have a practical contribution in terms of being carried out in a Pakistani context. Although Pakistan is the second-biggest Muslim country, with most people consuming only halal food, studies regarding the halal food purchase intention of Pakistani consumers are very scarce. Being Muslims brought up in a highly collectivist Islamic society, it is expected that Pakistani consumers are intrinsically motivated to purchase halal food products. However, significant empirical evidence is scant in previous halal food studies conducted in Pakistan, which highlight the impact of consumers' autonomy, competence, and relatedness on halal food purchase intention. Henceforth, the results of the study will be quite insightful for marketers, as well as halal food organizations and traders, in planning their advertising, marketing, and retail strategies. The study will provide a learning paradigm for academicians and practitioners and will clarify the picture of whether halal food marketing strategies should be based on intrinsic or extrinsic motives.

Nevertheless, Pakistan is a lucrative emerging market for imported halal foods, so conducting this study in Pakistan is expected to be highly beneficial for the organizations to develop strategies according to Pakistani consumers' perceptions about halal food and COO. In addition, despite the functioning of the Punjab Halal Food Authority (PHFA) and a few private halal certification bodies, the federal halal certification authority, namely the Pakistan Halal Food Authority (PHFA), is still non-functioning. The country lacks a reliable halal food certification system for products, and most of the products available in Pakistani markets do not carry a halal logo and certification. The study's findings will be useful at the macro level for the Pakistani government in launching the PHFA, which will ensure the quality and authenticity of local, imported, and exported halal food products. By exporting authentic and halal-certified food products, the country may eventually capture a sizable share of the halal food market.

## **1.7 Research Scope**

The demarcations of the study are discussed in the research scope. Simon and Goes (2011) defined the scope of study as the theoretical, methodological, and geographical elements that will be explored by the study. The underlying discussion elaborates on the delimitations of the present study.

The current research endeavor focuses mainly on the role of intrinsic motivational factors in shaping consumers' purchase intention for halal food products. The impact of autonomy, competence, relatedness, and attitude on halal food purchase intention has been studied. In addition, the study also measures the moderating impact of COO on halal food purchase intention. Hence, six constructs of interest, namely autonomy, competence, relatedness, attitude, COO, and halal food purchase intention, are considered felicitous to include in the study within the limited time frame allocated to it. However, future researchers are suggested to include other relevant constructs in the study to enhance a better understanding of consumers' halal food purchase intention. Secondly, SDT was the main underpinning theory used in the study, whereas the intrinsic component of TRA, i.e., "attitude," was also

examined in the present study. However, the effect of the other main component of TRA, i.e., “subjective norms,” was not analyzed in the present study. Subjective norms are extrinsic in nature (Leavell, 2017), and they overlap with social attitudes in collectivist cultures (Park, 2000; Riemer et al., 2014). Since the present research focuses mainly on the intrinsic motivation of consumers belonging to the highly collectivist society of Pakistan, it was considered appropriate to include only “attitude” in the study.

Lastly, the samples have been collected from consumers in Karachi, Lahore, and Islamabad as these are the big cities in Pakistan with a number of hypermarkets and superstores. In addition, the consumers in these cities have high purchasing power, are more educated, and are avid users of modern technological internet platforms. Hence, they are perceived to be more conscious and aware of the quality of the products they use. Although the findings may not be generalizable to other cities in the country because they are smaller and have fewer facilities, the current research endeavour serves as a guide for organizations and future researchers to conduct similar studies in different geographical regions of Pakistan as well as in different cultural settings.

## 1.8 Operational Definition of Terms

The following terms will be used in the study to discuss the findings and interpret the variables:

**Intrinsic motivational factors:** Intrinsic motivational factors urge the individuals to carry out activities without any external pressure, which are naturally enjoyable for them and lead to their innate satisfaction (Ryan & Deci, 2000, 2017). In the context of this study, intrinsic motivational factors pertain to the factors which trigger consumers to purchase halal food products without any external constraints, resulting in their satisfaction.

**Basic psychological needs:** The basic psychological needs of human beings build the basic foundation of intrinsic motivation and are built into their nature. Self-determination Theory (SDT) proposes that these needs are the individuals' inborn needs for autonomy, competence, and relatedness, and hold the utmost importance for their growth and well-being (Deci & Ryan, 1985, 2019). In the context of this study, these psychological needs relate to the innate needs of autonomy, competence, and relatedness of consumers to purchase halal food products. These three basic psychological needs are explained below:

**Autonomy:** Autonomy is defined as the ability to administer one's own behaviour. However, autonomy may not be mingled with independence; it is rather doing some activity with one's own will (Ryan & Connell, 1989; Ryan & Deci, 2017; Sheikholeslami & Arab-Moghaddam, 2010). In this study, autonomy refers to the perception of consumers towards their freedom to buy halal food products.

**Competence:** Competence is defined as having knowledge of the environment and thus developing a feeling of confidence and pride (Legault, 2017b; Ryan & Deci, 2017; Ryan & Powelson, 1991; White, 1960). In the context of this study, competence depicts the perception of consumers' knowledge of halal food offerings in the market and their ability to buy them with confidence and pride.

**Relatedness:** Relatedness refers to the inherent need for closeness and bonding with other human beings (Ryan & Deci, 2017). Relatedness is considered necessary for the transmission of cultural values and beliefs (Ryan & Deci, 2001, 2014). In this study, relatedness illustrates the halal food consumers' strong bond with other individuals who are also consuming halal food.

**Attitude:** Attitude is described as the positive or negative assessment of an individual towards performing an activity (Ajzen, 1991). In this study, attitude refers to the positive or negative feelings of the consumers for having halal food purchase intention.

**Country of Origin:** The country of origin (COO) of a product is the country in which it was manufactured (Astuti & Asih, 2021; Cattin, Jolibert, & Lohnes, 1982). In this study, the COO is regarded as the country in which halal food products have been produced, made, or originated from.

**Purchase Intention:** Purchase intention is defined as the readiness to buy a specific product (Ajzen, 1991; Crosno, Freling, & Skinner, 2009). In this study, halal food purchase intention has been used to measure Pakistani consumers' inclination to purchase halal food products.

## 1.9 Organization of the Study

The first chapter constitutes the background of the study and sheds light on the halal food industry and the importance of conducting research on the halal food purchase intention of consumers in Pakistan. The need to conduct the present study, in an attempt to fill a gap in previous studies, has been justified in the problem statement. The next section of the chapter comprises research questions and research objectives, research significance, research scope, definition of terms, and thesis organization.

The second chapter starts with a review of literature relevant to the study. The literature starts with studies pertaining to the concept of halal, followed by studies on the impact of the COO on halal food purchase intention. The theoretical foundation of the study was then discussed by studying TRA and SDT. The literature review regarding the variables, namely, autonomy, competence, relatedness, attitude, COO, and halal food purchase intention has been studied, which has led to the formulation of hypotheses and finally a conceptual framework.

The third chapter is about the methodology used in the research and starts with a discussion of the research paradigm and research approach. A positivist paradigm and a quantitative research approach have been used to carry out the present study. The next section discusses the research design, which describes the



purpose of study, type of investigation, researcher's interference, study setting, unit of analysis, and time horizon. The discussion is then followed by the sample design, which comprises the population, sample size, and sampling technique. Finally, the data analysis procedure has been explained with emphasis on the use of structural equation modeling (SEM).

The fourth chapter explains the data analysis and findings of the study. Management of missing values and outliers has been done by using SPSS, while the analysis of the data has been done by using PLS (SEM). The procedure for analysing the data has been discussed in detail in this chapter.

The last chapter finally concludes the research by summarizing the results of the findings and comparing them with already-available literature. Moreover, the significance and non-significance of the findings have been justified in addition to the theoretical and practical contribution of the study. The last section of chapter five sheds light on the limitations of the study and recommendations for future studies. Figure 1.4 depicts the organization of the thesis briefly.

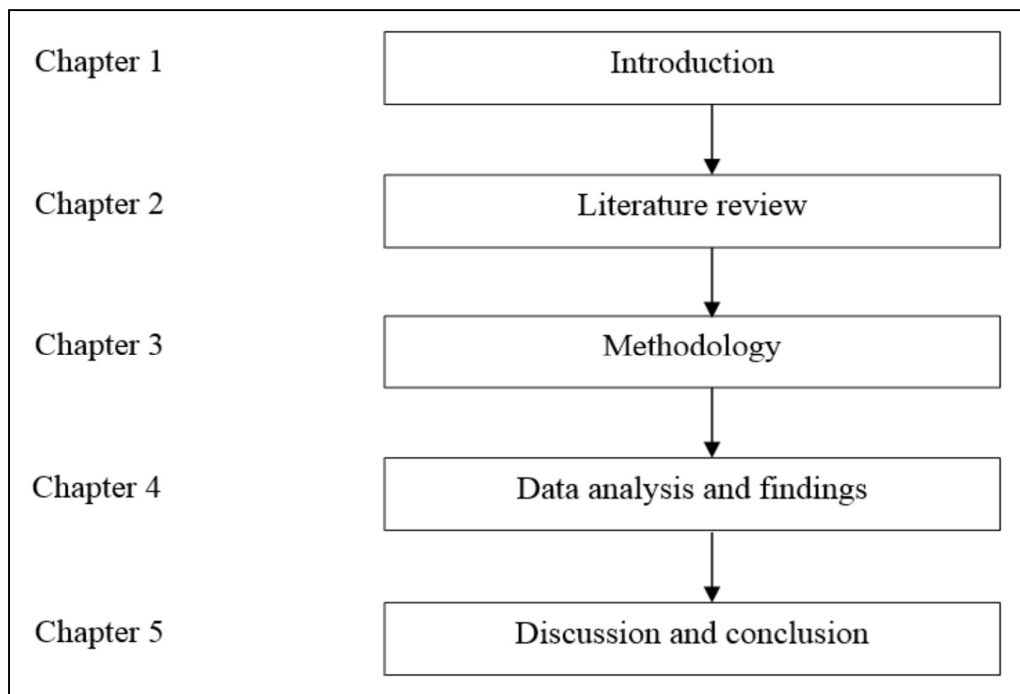


Figure 1.4 Organization of the study

## **1.10 Summary**

The present chapter addresses the background and importance of carrying out research on halal food purchase intention. The chapter provides insights regarding the need to understand the role of intrinsic motivation in determining halal food purchase intention. In addition, this chapter casts light on the theoretical foundation of the study, followed by the formulation of a problem statement that elucidates the research gaps being addressed in the study. Subsequently, the research questions and objectives have been outlined. Furthermore, the study's theoretical and practical contributions have been presented in the significance of the study, and the study's limitations have been discussed. Finally, the variables are defined, followed by thesis outline.

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## Appendix A Research Questionnaire

### UNIVERSITI TEKNOLOGI MALAYSIA INTERNATIONAL BUSINESS SCHOOL

This study is being carried out to get an understanding of consumers about their consumption pattern of Halal food purchase habits and the knowledge they have about Halal authenticity of imported food products. Submission of questionnaire indicates your voluntary participation in the survey. It is being assured that the identity of any respondent will not be disclosed at any point, and the information received will be used totally for the purpose of this research which is a part of the thesis for the Doctor of Philosophy (PhD) degree under Universiti Teknologi Malaysia. You are requested to kindly fill up the questionnaire based on your true knowledge and judgment. Your opinion would be highly valuable and helpful. Thank you.

In case of any queries, please feel free to contact:	
Sumera Syed International Business School, Universiti Teknologi Malaysia, 54100, Kuala Lumpur. Telephone: +923335133344 Email: sumera0005@gmail.com	Associate Professor Dr. Fauziah Sh. Ahmad International Business School, Universiti Teknologi Malaysia, 54100, Kuala Lumpur. Telephone: +600321805069 Email: fsa@ibs.utm.my

**Section A:**

**Please mark with ✓ across the best suitable answer.**

1. Do you go for shopping to supermarkets / hypermarkets?  
Yes ( )                      No ( )
2. Do you often buy food items from supermarkets / hypermarkets?  
Yes ( )                      No ( )
3. Do you prefer imported packed food items over the local ones?  
Yes ( )                      No ( )
4. Do you prefer fresh meat from local butchers over the frozen imported meat?  
Yes ( )                      No ( )
5. Do you look for Halal logo while buying food products?  
Yes ( )                      No ( )
6. Do you prefer doing shopping from the closest proximity stores of your residence?  
Yes ( )                      No ( )
7. Are you willing to go to the stores located far from your home depending on the availability of good quality Halal food products in those stores?  
Yes ( )                      No ( )
8. Whom do you go for shopping with?  
Preferably alone ( )                      With friends ( )  
Only with Spouse ( )                      With Family ( )
9. How frequent do you carry out a grocery purchase activity for household consumption?  
Once in a week ( )                      Once in a month ( )  
Twice in a week ( )                      Twice in a month ( )
10. How do you go for shopping?
  - i. Car ( )
  - ii. Public Transport ( )
  - iii. Using App hailing rides - Uber / Careem ( )

- iv. Motorbike ( )
- v. Others ( ) Please Specify .....

11. Please identify your source of knowledge on Halal food. You may choose more than one option. Kindly mark with ✓.

- i. Books ( )
- ii. Magazines ( )
- iii. Newspapers ( )
- iv. Radio/Television ( )
- v. Internet/ Social Media ( )
- vi. Family/ Friends ( )
- vii. Retail stores/ Super stores/ Hypermarkets ( )
- viii. Mosques/ Quran ( )
- ix. Others ( ) Please Specify .....

**Section B:**

**Kindly use the scale below to show your level of agreement/disagreement against the statements given below in this section. Please circle your answer.**

<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neither Agree nor Disagree</b>	<b>Agree</b>	<b>Strongly Agree</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

**The following statements are related to the freedom you have in purchasing Halal food products.**

1.	I feel free to choose Halal food products.	1 2 3 4 5
2.	I generally feel free to express my ideas and opinions regarding Halal food products.	1 2 3 4 5
3.	I feel that the Halal food products I consume are highly compatible with my choices and interests.	1 2 3 4 5

4.	I feel very strongly that I have the opportunity to make choices when it comes to purchasing different Halal food products.	1	2	3	4	5
----	---	---	---	---	---	---

**The following statements are related to the knowledge and ability you have for purchasing Halal food products.**

1.	I feel confident that I have sufficient knowledge to buy Halal food products.	1	2	3	4	5
2.	I investigate a lot before buying Halal food products.	1	2	3	4	5
3.	I am capable of recognizing authentic Halal food products being offered in the market.	1	2	3	4	5
4.	I feel that I can manage well my Halal food needs.	1	2	3	4	5

**The following statements are related to the influence of emotional bond you have while purchasing Halal food products.**

1.	I feel very much at ease with people who consume Halal food products.	1	2	3	4	5
2.	I share a common bond with other people who are consuming Halal food products.	1	2	3	4	5
3.	I feel connected with other people who are consuming Halal food products.	1	2	3	4	5
4.	I can freely socialize with people who consume Halal food products.	1	2	3	4	5
5.	I feel that there are open channels of communication with other people who are consuming Halal food products.	1	2	3	4	5

**The following statements are related to the feelings you have while purchasing Halal food products.**

1.	I think Halal food is more trustworthy to consume as compared to non-Halal food.	1	2	3	4	5
2.	I think Halal food is clean as compared to non-Halal	1	2	3	4	5

	food.	
3.	I think Halal food is healthy.	1 2 3 4 5
4.	I think Halal food is safe to consume.	1 2 3 4 5

**The following statements are related to the purchase of imported Halal food products.**

1.	I think Halal food products originating from Muslim countries are of good quality.	1 2 3 4 5
2.	I prefer Halal food products originating from Muslim countries because they have a transparent process of Halal certification.	1 2 3 4 5
3.	I think Halal food products originating from Muslim countries are strictly monitored throughout the whole process of production until they reach warehouse.	1 2 3 4 5

**The following statements are related to your intention to buy Halal food products in future.**

1.	The probability that I would consider buying Halal food is high.	1 2 3 4 5
2.	I will make sure that the food is labelled Halal before purchasing it.	1 2 3 4 5
3.	I would recommend my family/ friends/ relatives to buy Halal food products only.	1 2 3 4 5

**Section C:**

**Please mark with ✓ across the box describing you.**

1. Gender

Male ( ) Female ( )

4. Age

Below 18 years old ( )

18-25 years old ( )

26-32 years old ( )  
33-40 years old ( )

41-50 years old ( )  
More than 50 years old ( )

3. Marital status

Married ( )  
Unmarried ( )

Divorced ( )  
Widow ( )

4. City

Islamabad ( )  
Karachi ( )  
Lahore ( )  
Others ( ) Please Specify .....

5. Religion

Islam ( )  
Christianity ( )

Others ( ) Please Specify .....

6. Education Level

High School ( )  
Intermediate ( )  
Bachelors ( )

Masters ( )  
PhD ( )  
Diploma ( )

7. Occupation

Student ( )  
Working professional ( )

Housewife ( )

8. Employment status

Employed ( )  
Unemployed ( )

Self-employed ( )

9. Household Monthly Income

Less than Rs. 40,000 ( )  
Rs. 40,000 - Rs. 59,999 ( )  
Rs. 60,000 - Rs. 84,999 ( )  
Rs. 85,000 - Rs. 109,999 ( )

Rs. 110,000 - Rs. 134,999 ( )  
Rs. 135,000 - Rs. 160,000 ( )  
More than Rs. 160,000

10. Family Living Status

Joint family system ( )

Individual family system ( )

**THANK YOU FOR PARTICIPATING IN THE SURVEY.**



## Appendix B Template Used for Content Validation

### QUESTIONNAIRE VALIDATION

#### TITLE: AN ORGANISMIC APPROACH TO HALAL FOOD PURCHASE INTENTION WITH COUNTRY OF ORIGIN AS A MODERATOR

Dear Marketer /Prof/Assoc. Prof./Dr.,

I am currently doing the aforementioned research as my PhD thesis. I have prepared a questionnaire using the items adapted from previous studies to measure the construct of interest. The current stage of my research is “*content validate*” the items to establish whether they matched their operational definition. I would be grateful if you could spare some time to read through the items and assess their content validity.

Please respond to the exercise by indicating (✓) whether each item is a “*Perfect Match*”, “*Moderate Match*” or “*Poor Match*”.

I thank you in advance for your time and expertise.

.....  
**Sumera Syed**

(PhD Candidate)

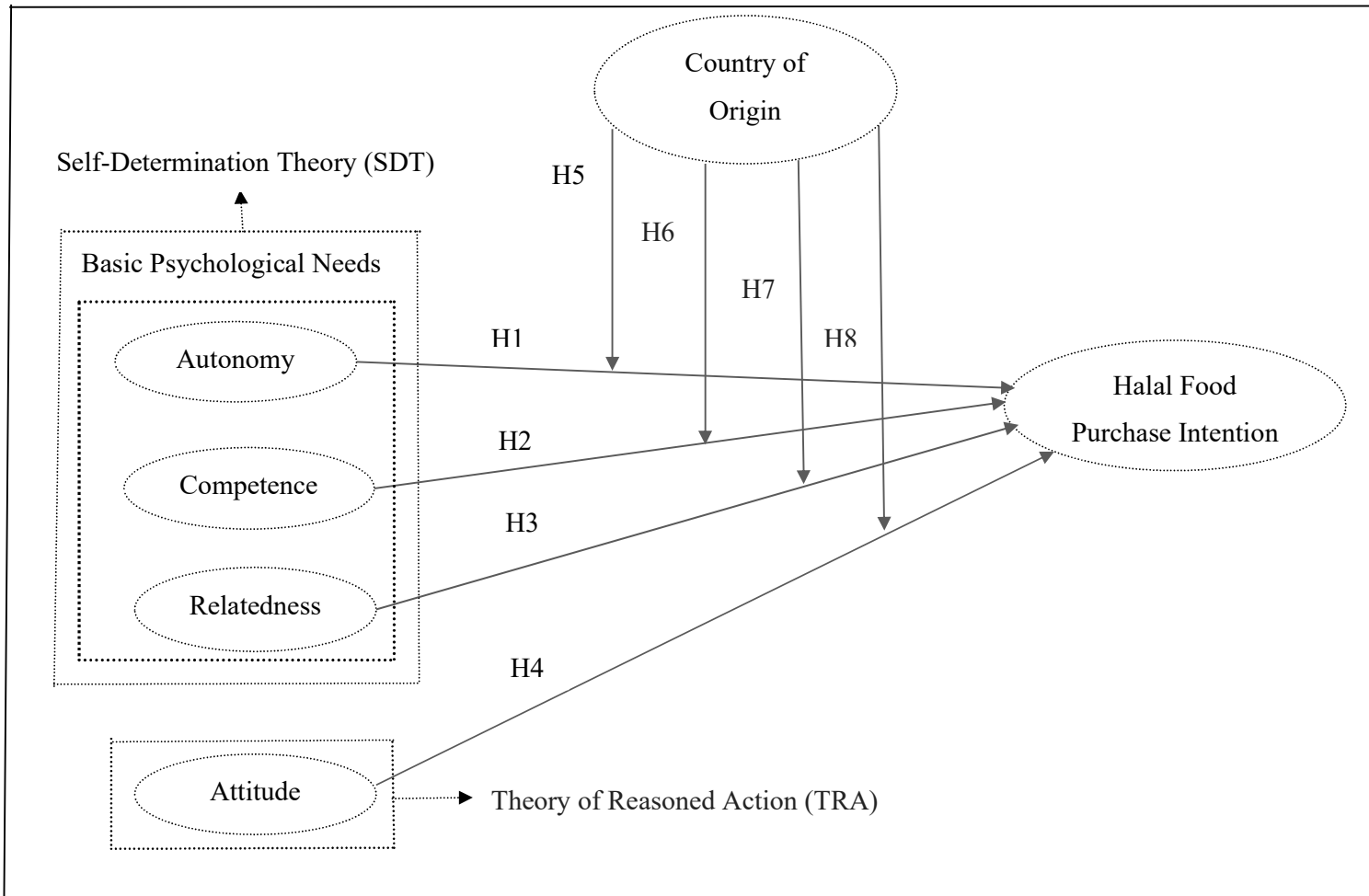
International Business School (IBS)

Universiti Teknologi Malaysia

Kuala Lumpur

Malaysia

### The Conceptual Framework



<b>Construct &amp; Operational Definition</b>	<b>Questionnaire Items</b>	<b>Likert Scale</b>	<b>Perfect Match</b> (Maintain item as it is)	<b>Moderate Match</b> (Maintain item but needs some refining)	<b>Poor Match</b> (Remove item)	<b>Comment</b>
<b>Autonomy</b> This factor refers to the perception of consumers towards their freedom to buy Halal food products.	1. I feel free to choose Halal food products.	1- Strongly Disagree				
	2. I enjoy eating Halal food.	2- Disagree				
	3. I feel the Halal food products I consume are highly compatible with my choices and interests.	3- Somewhat Disagree				
	4. I feel very strongly that I have the opportunity to make choices when it comes to purchasing different food products.	4- Neither Agree nor Disagree				
	5. I generally feel free to express my ideas and opinions while shopping for Halal food products.	5- Somewhat Agree 6- Agree 7- Strongly Agree				
<b>Competence</b> This factor refers to the perception of consumers' knowledge of Halal food offerings in the market and their	1. I feel confident in my ability to buy good quality Halal food products.	1- Strongly Disagree				
	2. I am capable of paying high amount of money to buy good quality Halal food products.	2- Disagree 3- Somewhat Disagree				
	3. I mostly feel a sense of accomplishment when I buy Halal food products.	4- Neither Agree nor Disagree				

ability to buy it with confidence and pride.	4. In my life I do not get much of a chance to show how capable I am while purchasing Halal food products. ®	5- Somewhat Agree 6- Agree				
	5. I investigate a lot before buying Halal food products.	7- Strongly Agree				
<b>Relatedness</b> This factor refers to consumers' purchase of Halal food products in order to have a strong emotional bond with loved ones.	1. I feel very much at ease with people who consume Halal food products.	1- Strongly Disagree 2- Disagree				
	2. I feel there are open channels of communication with other people who are consuming Halal food products.	3- Somewhat Disagree 4- Neither Agree nor Disagree				
	3. I share a common bond with other people who are consuming Halal food products.	5- Somewhat Agree 6- Agree				
	4. I feel connected with other people who are consuming Halal food products.	7- Strongly Agree				
<b>Attitude</b> This factor refers to the positive or negative feelings of the consumers for having Halal	1. I think Halal food is more trustworthy to consume as compared to non-Halal food.	1- Strongly Disagree 2- Disagree				
	2. I think Halal food is clean as compared to non-Halal food.	3- Somewhat Disagree 4- Neither Agree nor Disagree				
	3. I think Halal food is healthy.					
	4. I think consuming Halal food is important.					

food purchase intention.	5. I think Halal food is safe to consume.	5- Somewhat Agree 6- Agree 7- Strongly Agree				
<b>Country of Origin</b> This factor refers to the country in which Halal food products have been produced, made or originated from.	1. I think food products originating from Muslim countries are of good quality.	1- Strongly Disagree 2- Disagree				
	2. I prefer Halal food products originating from Muslim countries because they have a transparent process of Halal certification.	3- Somewhat Disagree 4- Neither Agree nor Disagree				
	3. I think food products originating from Muslim countries are strictly monitored throughout the whole process of production until they reach warehouse.	5- Somewhat Agree 6- Agree 7- Strongly Agree				
	4. I think credibility of Halal logo depends on country of origin.	7- Strongly Agree				
	5. I think non-Muslim countries also regulate Halal food production.					
<b>Purchase Intention</b> This factor refers to the Muslim consumers'	1. I will most probably buy Halal food products only.	1- Strongly Disagree				
	2. I will make sure that the food is Halal before purchasing it.	2- Disagree 3- Somewhat Disagree				
	3. I will recommend my friends to buy Halal food products only.	4- Neither				

willingness to purchase Halal food products.	4. I intend to buy imported Halal food products from non- Muslim producers also.	Agree nor Disagree 5- Somewhat				
	5. I'm motivated to buy Halal food because my family consumes Halal food only.	Agree 6- Agree 7- Strongly				
	6. I will feel safe to buy Halal labelled products.	Agree				

**Validator's Signature & Stamp:** .....**Date** .....

## Appendix C Data Analysis for Pilot Study

### EFA of Exogenous Variables

#### **KMO and Bartlett's Test**

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.869
	Approx. Chi-Square	2062.368
Bartlett's Test of Sphericity	df	190
	Sig.	.000

#### **Communalities**

	Initial	Extraction
Aut1	1.000	.559
Aut3	1.000	.731
Aut4	1.000	.716
Aut5	1.000	.672
Comp1	1.000	.654
Comp2	1.000	.699
Comp3	1.000	.705
Comp4	1.000	.563
Rel1	1.000	.612
Rel2	1.000	.754
Rel3	1.000	.733
Rel4	1.000	.591
Rel5	1.000	.574
Att1	1.000	.638
Att2	1.000	.769
Att3	1.000	.770
Att4	1.000	.779
COO1	1.000	.720
COO2	1.000	.820
COO3	1.000	.756

Extraction Method: Principal Component Analysis.

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.075	35.373	35.373	7.075	35.373	35.373	3.368	16.841	16.841
2	2.691	13.455	48.828	2.691	13.455	48.828	2.916	14.581	31.422
3	1.594	7.969	56.797	1.594	7.969	56.797	2.695	13.477	44.900
4	1.384	6.921	63.718	1.384	6.921	63.718	2.463	12.317	57.217
5	1.073	5.365	69.083	1.073	5.365	69.083	2.373	11.867	69.083
6	.713	3.564	72.647						
7	.635	3.175	75.823						
8	.604	3.021	78.844						
9	.545	2.727	81.571						
10	.532	2.662	84.233						
11	.458	2.288	86.521						
12	.449	2.246	88.767						
13	.395	1.976	90.743						
14	.372	1.861	92.604						
15	.332	1.661	94.265						
16	.287	1.437	95.702						
17	.256	1.282	96.985						
18	.229	1.146	98.131						
19	.205	1.026	99.157						
20	.169	.843	100.000						



**Rotated Component Matrix<sup>a</sup>**

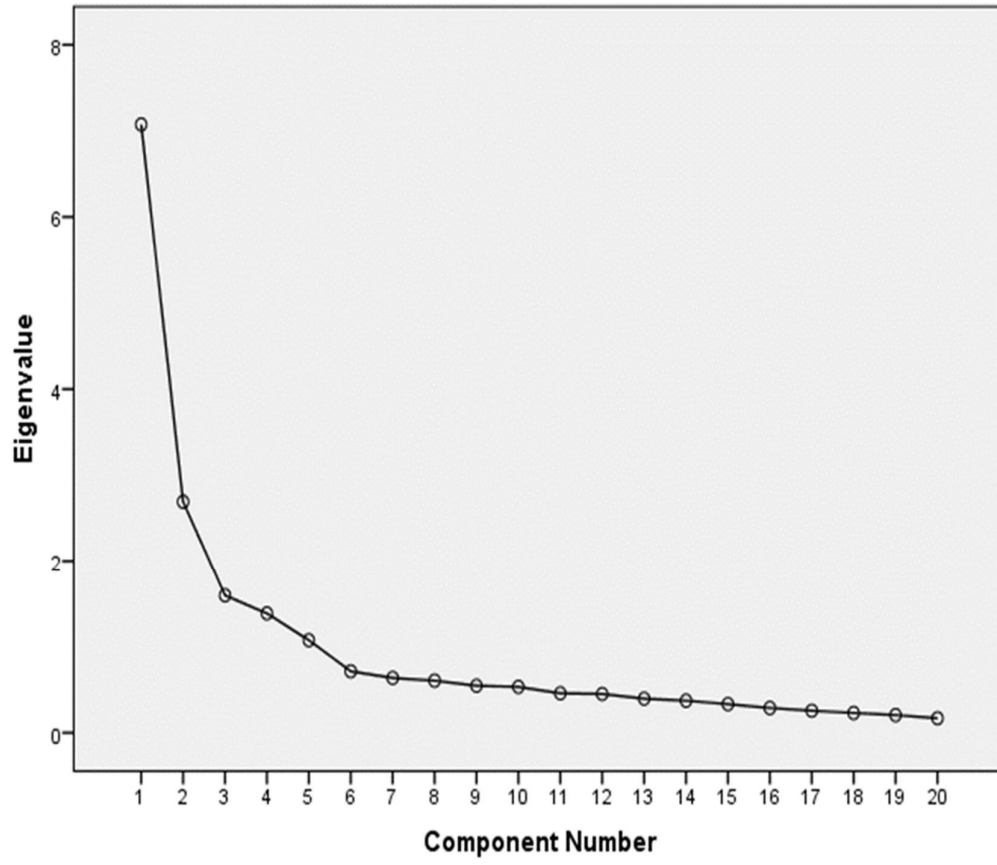
	Component				
	1	2	3	4	5
Rel2	.844				
Rel3	.828				
Rel1	.735				
Rel4	.725				
Rel5	.665				
Att4		.804			
Att3		.801			
Att2		.796			
Att1		.699			
Aut3			.825		
Aut4			.764		
Aut1			.725		
Aut5			.683		
Comp3				.776	
Comp2				.772	
Comp1				.706	
Comp4				.608	
COO2					.855
COO3					.821
COO1					.790

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 6 iterations.

Scree Plot



## EFA of Endogenous Variable

### KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.733
	Approx. Chi-Square	271.218
Bartlett's Test of Sphericity	df	3
	Sig.	.000

### Communalities

	Initial	Extraction
Pur1	1.000	.789
Pur2	1.000	.756
Pur3	1.000	.795

Extraction Method: Principal Component Analysis.

### Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	2.340	77.992	77.992	2.340	77.992	77.992
2	.361	12.045	90.037			
3	.299	9.963	100.000			

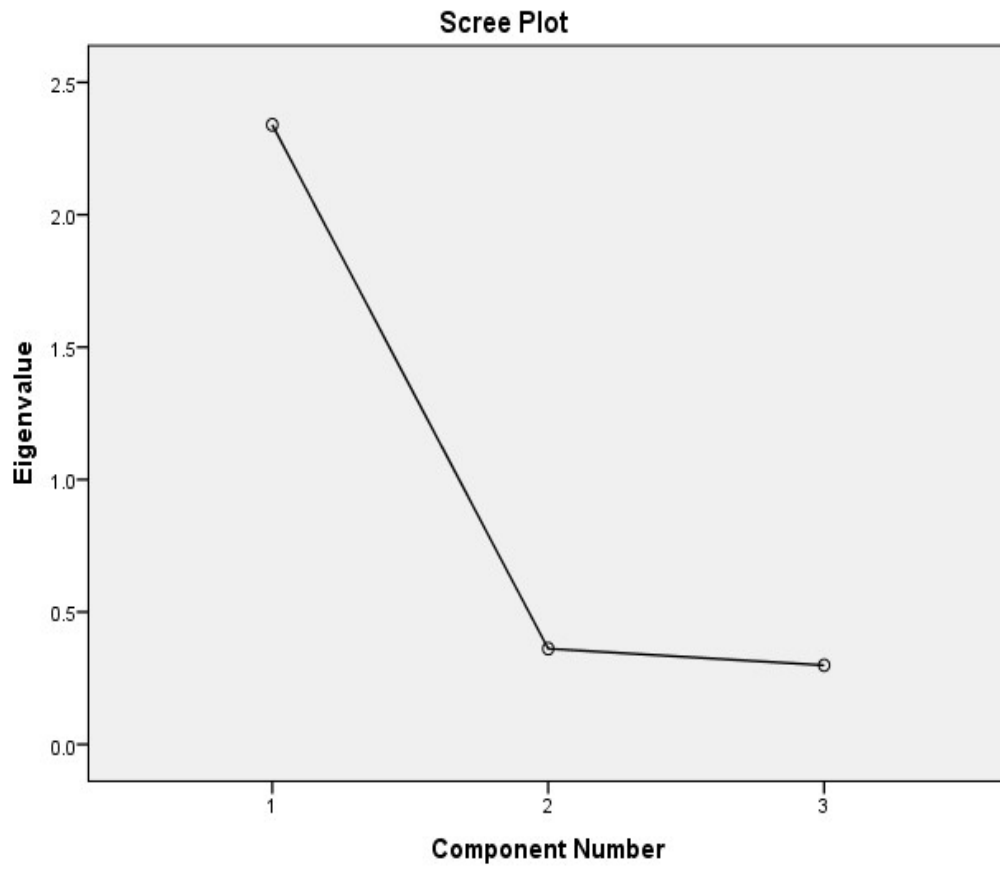
Extraction Method: Principal Component Analysis.

### Component Matrix<sup>a</sup>

	Component
	1
Pur1	.888
Pur2	.869
Pur3	.892

Extraction Method: Principal Component Analysis.

a. 1 component extracted.



### **Reliability Analysis (Cronbach's Alpha)**

#### **Autonomy**

Cronbach's Alpha	N of Items
.808	4

#### **Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Aut1	13.20	5.494	.546	.805
Aut3	13.26	4.746	.703	.722
Aut4	13.04	6.250	.691	.745
Aut5	13.11	6.098	.626	.762

#### **Competence**

Cronbach's Alpha	N of Items
.788	4

#### **Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Comp1	12.06	5.258	.637	.719
Comp2	12.63	4.896	.552	.763
Comp3	12.47	4.331	.668	.699
Comp4	11.88	5.818	.566	.756

**Relatedness**

Cronbach's Alpha	N of Items
.855	5

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Rel1	17.69	6.699	.633	.837
Rel2	17.77	6.221	.733	.812
Rel3	17.88	5.805	.732	.808
Rel4	17.87	5.772	.668	.827
Rel5	18.02	5.768	.622	.842

**Attitude**

Cronbach's Alpha	N of Items
.873	4

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Att1	13.72	3.511	.654	.866
Att2	13.76	3.048	.773	.820
Att3	13.66	3.544	.752	.830
Att4	13.65	3.505	.747	.830

**Country of origin**

Cronbach's Alpha	N of Items
.840	3

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
COO1	8.52	2.683	.675	.807
COO2	8.49	2.533	.772	.717
COO3	8.78	2.343	.679	.812

**Halal food purchase intention**

Cronbach's Alpha	N of Items
.820	3

**Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Pur1	9.28	1.087	.734	.760
Pur2	9.58	.587	.709	.812
Pur3	9.38	.920	.734	.705

**Data Distribution**

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Aut1	200	4.34	1.082	-1.529	.172	1.260	.342
Aut2	200	4.31	1.114	-1.564	.172	1.404	.342
Aut3	200	4.29	1.100	-1.615	.172	1.827	.342
Aut4	200	4.51	.709	-1.105	.172	-.162	.342
Comp1	200	4.29	.842	-1.051	.172	.420	.342
Comp2	200	3.71	1.020	-.253	.172	-1.055	.342
Comp3	200	3.88	1.065	-.906	.172	.346	.342
Comp4	200	4.47	.750	-1.379	.172	1.435	.342
Rel1	200	4.62	.623	-1.412	.172	.851	.342
Rel2	200	4.54	.671	-1.154	.172	.082	.342
Rel3	200	4.42	.773	-1.164	.172	.549	.342
Rel4	200	4.44	.830	-1.335	.172	.856	.342
Rel5	200	4.28	.870	-.912	.172	-.236	.342
Att1	200	4.55	.722	-1.578	.172	1.985	.342
Att2	200	4.50	.789	-1.393	.172	.869	.342
Att3	200	4.60	.649	-1.400	.172	.710	.342
Att4	200	4.61	.663	-1.455	.172	.776	.342
COO1	200	4.38	.841	-1.210	.172	.625	.342
COO2	200	4.41	.827	-1.145	.172	.233	.342
COO3	200	4.12	.957	-.753	.172	-.367	.342
Pur1	200	4.84	.368	-1.869	.172	1.508	.342
Pur2	200	4.54	.679	-1.169	.172	.081	.342
Pur3	200	4.74	.462	-1.408	.172	.752	.342
Valid N (listwise)	200						



## Appendix D Descriptive Analysis (Actual Study)

### Gender

	Frequency	Percent	Valid Percent	Cumulative Percent
Male	121	39.9	39.9	39.9
Valid Female	182	60.1	60.1	100.0
Total	303	100.0	100.0	

### Age

	Frequency	Percent	Valid Percent	Cumulative Percent
18-25 years old	92	30.4	30.4	30.4
26-32 years old	66	21.8	21.8	52.1
33-39 years old	67	22.1	22.1	74.3
Valid 40-50 years old	52	17.2	17.2	91.4
More than 50 years old	26	8.6	8.6	100.0
Total	303	100.0	100.0	

### Marital status

	Frequency	Percent	Valid Percent	Cumulative Percent
Married	175	57.8	57.8	57.8
Unmarried	124	40.9	40.9	98.7
Valid Divorced	1	.3	.3	99.0
Widow	3	1.0	1.0	100.0
Total	303	100.0	100.0	

**City**

	Frequency	Percent	Valid Percent	Cumulative Percent
Islamabad	74	24.4	24.4	24.4
Valid Lahore	180	59.4	59.4	83.8
Karachi	49	16.2	16.2	100.0
Total	303	100.0	100.0	

**Religion**

	Frequency	Percent	Valid Percent	Cumulative Percent
Islam	302	99.7	99.7	99.7
Valid Christianity	1	.3	.3	100.0
Total	303	100.0	100.0	

**Education**

	Frequency	Percent	Valid Percent	Cumulative Percent
High School	4	1.3	1.3	1.3
Intermediate	14	4.6	4.6	5.9
Bachelors	128	42.2	42.2	48.2
Valid Masters	143	47.2	47.2	95.4
PhD	12	4.0	4.0	99.3
Diploma	2	.7	.7	100.0
Total	303	100.0	100.0	

### Occupation

	Frequency	Percent	Valid Percent	Cumulative Percent
Student	84	27.7	27.7	27.7
Valid Working professional	154	50.8	50.8	78.5
Housewife	65	21.5	21.5	100.0
Total	303	100.0	100.0	

### Employment

	Frequency	Percent	Valid Percent	Cumulative Percent
Employed	132	43.6	43.6	43.6
Valid Unemployed	129	42.6	42.6	86.1
Self-employed	42	13.9	13.9	100.0
Total	303	100.0	100.0	

### Income

	Frequency	Percent	Valid Percent	Cumulative Percent
Less than Rs. 40,000	16	5.3	5.3	5.3
Rs. 40,000 - Rs. 59,999	42	13.9	13.9	19.1
Rs. 60,000 - Rs. 84,999	43	14.2	14.2	33.3
Valid Rs. 85,000 - Rs. 109,999	68	22.4	22.4	55.8
Rs. 110,000 - Rs. 134,999	45	14.9	14.9	70.6
Rs. 135,000 - Rs. 160,000	22	7.3	7.3	77.9
More than Rs. 160,000	67	22.1	22.1	100.0
Total	303	100.0	100.0	

**Family**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Joint family system	119	39.3	39.3	39.3
Valid Individual family system	184	60.7	60.7	100.0
Total	303	100.0	100.0	

**Members**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Less than 3 members	18	5.9	5.9	5.9
Valid 3 - 5 members	169	55.8	55.8	61.7
Valid 6 - 9 members	94	31.0	31.0	92.7
Valid More than 9 members	22	7.3	7.3	100.0
Total	303	100.0	100.0	

**Do you go for shopping to supermarkets / hypermarkets?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	289	95.4	95.4	95.4
Valid no	14	4.6	4.6	100.0
Total	303	100.0	100.0	

**Do you often buy food items from supermarkets / hypermarkets?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	260	85.8	85.8	85.8
Valid no	43	14.2	14.2	100.0
Total	303	100.0	100.0	

**Do you prefer imported packed food items over the local ones?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	117	38.6	38.6	38.6
Valid no	186	61.4	61.4	100.0
Total	303	100.0	100.0	

**Do you prefer fresh meat from local butchers over the frozen imported meat?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	275	90.8	90.8	90.8
Valid no	28	9.2	9.2	100.0
Total	303	100.0	100.0	

**Do you look for Halal logo while buying food products?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	242	79.9	79.9	79.9
Valid no	61	20.1	20.1	100.0
Total	303	100.0	100.0	

**Do you prefer doing shopping from the closest proximity stores of your residence?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	253	83.5	83.5	83.5
Valid no	50	16.5	16.5	100.0
Total	303	100.0	100.0	

**Are you willing to go the stores located far from your home depending on the availability of good quality Halal food products in those stores?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid yes	254	83.8	83.8	83.8
Valid no	49	16.2	16.2	100.0
Total	303	100.0	100.0	

**Whom do you go for shopping with?**

	Frequency	Percent	Valid Percent	Cumulative Percent
Preferably alone	69	22.8	22.8	22.8
Only with spouse	58	19.1	19.1	41.9
Valid With friends	15	5.0	5.0	46.9
With Family	161	53.1	53.1	100.0
Total	303	100.0	100.0	

**How frequent do you carry out a grocery purchase activity for household consumption?**

	Frequency	Percent	Valid Percent	Cumulative Percent
once in a week	72	23.8	23.8	23.8
twice in a week	28	9.2	9.2	33.0
Valid once in a month	133	43.9	43.9	76.9
twice in a month	70	23.1	23.1	100.0
Total	303	100.0	100.0	

**How do you go for shopping?**

	Frequency	Percent	Valid Percent	Cumulative Percent
car	238	78.5	78.5	78.5
public transport	12	4.0	4.0	82.5
Valid Using App hailing rides - Uber / Careem	19	6.3	6.3	88.8
motorbike	34	11.2	11.2	100.0
Total	303	100.0	100.0	

### Halal food knowledge

		Responses		Percent of Cases
		N	Percent	
Halalfood knowledge	Knowledge on Halal food through books.	61	8.0%	20.1%
	Knowledge on Halal food through magazines.	20	2.6%	6.6%
	Knowledge on Halal food through newspapers.	45	5.9%	14.9%
	Knowledge on Halal food through radio/television.	52	6.8%	17.2%
	Knowledge on Halal food through internet/social media.	161	21.0%	53.1%
	Knowledge on Halal food through family/friends.	172	22.5%	56.8%
	Knowledge on Halal food through retail stores/ super stores/ hypermarkets.	70	9.1%	23.1%
	Knowledge on Halal food through mosques/ Quran.	182	23.8%	60.1%
	Knowledge on Halal food through others.	3	0.4%	1.0%
Total		766	100.0%	252.8%

### Descriptive Statistics (Research Instrument)

	N	Mean	Std. Deviation	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Aut1	303	4.43	.888	-1.525	.140	1.501	.279
Aut3	303	4.19	1.007	-1.011	.140	-.098	.279
Aut4	303	4.45	.766	-1.241	.140	.739	.279
Aut5	303	4.37	.847	-1.191	.140	.510	.279
Comp1	303	4.37	.710	-.998	.140	.875	.279
Comp2	303	3.58	.976	-.163	.140	-.956	.279
Comp3	303	4.00	.848	-.486	.140	-.441	.279
Comp4	303	4.43	.682	-.921	.140	.166	.279
Rel1	303	4.55	.678	-1.354	.140	.997	.279
Rel2	303	4.48	.731	-1.268	.140	.966	.279
Rel3	303	4.37	.823	-1.093	.140	.293	.279
Rel4	303	4.33	.900	-1.241	.140	.879	.279
Rel5	303	4.17	.964	-.991	.140	.262	.279
Att1	303	4.51	.788	-1.548	.140	1.563	.279
Att2	303	4.48	.837	-1.490	.140	1.239	.279
Att3	303	4.57	.728	-1.634	.140	1.837	.279
Att4	303	4.61	.672	-1.585	.140	1.604	.279
COO1	303	4.42	.817	-1.303	.140	.931	.279
COO2	303	4.38	.856	-1.190	.140	.441	.279
COO3	303	4.08	.968	-.725	.140	-.361	.279
Pur1	303	4.82	.383	-1.690	.140	.862	.279
Pur2	303	4.52	.690	-1.163	.140	.269	.279
Pur3	303	4.72	.473	-1.244	.140	.240	.279
Valid N (listwise)	303						



**Appendix E Harman's Single Factor Test (Common Method Variance / bias)**

**Total Variance Explained**

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	8.011	34.828	34.828	8.011	34.828	34.828
2	2.752	11.966	46.794			
3	1.687	7.334	54.129			
4	1.366	5.941	60.069			
5	1.155	5.023	65.092			
6	1.076	4.679	69.772			
7	.730	3.176	72.948			
8	.673	2.924	75.872			
9	.646	2.807	78.679			
10	.590	2.567	81.246			
11	.529	2.301	83.547			
12	.480	2.085	85.632			
13	.460	2.000	87.632			
14	.425	1.847	89.479			
15	.382	1.661	91.141			
16	.356	1.549	92.689			
17	.317	1.378	94.068			
18	.312	1.355	95.422			
19	.266	1.158	96.580			
20	.246	1.068	97.648			
21	.238	1.034	98.682			
22	.178	.774	99.456			
23	.125	.544	100.000			

Extraction Method: Principal Component Analysis.

## Appendix F Smart PLS Results (Measurement Model)

### Cronbach's Alpha

	<b>Cronbach's Alpha</b>
<b>Autonomy</b>	0.891
<b>Competence</b>	0.829
<b>Relatedness</b>	0.849
<b>Attitude</b>	0.891
<b>Country of origin</b>	0.830
<b>Halal food purchase intention</b>	0.822

### Composite Reliability

	<b>Composite Reliability</b>
<b>Autonomy</b>	0.923
<b>Competence</b>	0.886
<b>Relatedness</b>	0.892
<b>Attitude</b>	0.925
<b>Country of origin</b>	0.898
<b>Halal food purchase intention</b>	0.893

### Average Variance Extracted (AVE)

	<b>Average Variance Extracted (AVE)</b>
<b>Autonomy</b>	0.749
<b>Competence</b>	0.661
<b>Relatedness</b>	0.622
<b>Attitude</b>	0.754
<b>Country of origin</b>	0.746
<b>Halal food purchase intention</b>	0.736

**Outer loadings**

	<b>Attitude</b>	<b>Autonomy</b>	<b>Competence</b>	<b>COO</b>	<b>Halal food purchase intention</b>	<b>Relatedness</b>
<b>Att1</b>	0.838					
<b>Att2</b>	0.889					
<b>Att3</b>	0.876					
<b>Att4</b>	0.870					
<b>Aut1</b>		0.842				
<b>Aut3</b>		0.862				
<b>Aut4</b>		0.872				
<b>Aut5</b>		0.887				
<b>Comp1</b>			0.807			
<b>Comp2</b>			0.811			
<b>Comp3</b>			0.856			
<b>Comp4</b>			0.776			
<b>COO1</b>				0.849		
<b>COO2</b>				0.904		
<b>COO3</b>				0.837		
<b>Pur1</b>					0.834	
<b>Pur2</b>					0.872	
<b>Pur3</b>					0.868	
<b>Rel1</b>						0.776
<b>Rel2</b>						0.806
<b>Rel3</b>						0.825
<b>Rel4</b>						0.779
<b>Rel5</b>						0.756

**Outer weights**

	<b>Attitude</b>	<b>Autonomy</b>	<b>Competence</b>	<b>COO</b>	<b>Halal food purchase intention</b>	<b>Relatedness</b>
<b>Att1</b>	0.285					
<b>Att2</b>	0.265					
<b>Att3</b>	0.309					
<b>Att4</b>	0.293					
<b>Aut1</b>		0.224				
<b>Aut3</b>		0.241				
<b>Aut4</b>		0.319				
<b>Aut5</b>		0.367				
<b>Comp1</b>			0.300			
<b>Comp2</b>			0.318			
<b>Comp3</b>			0.326			
<b>Comp4</b>			0.284			
<b>COO1</b>				0.387		
<b>COO2</b>				0.420		
<b>COO3</b>				0.349		
<b>Pur1</b>					0.337	
<b>Pur2</b>					0.430	
<b>Pur3</b>					0.396	
<b>Rel1</b>						0.306
<b>Rel2</b>						0.223
<b>Rel3</b>						0.259
<b>Rel4</b>						0.257
<b>Rel5</b>						0.224

**Cross loadings**

	<b>Attitude</b>	<b>Autonomy</b>	<b>Competence</b>	<b>Country of origin</b>	<b>Halal food purchase intention</b>	<b>Relatedness</b>
<b>Att1</b>	<b>0.838</b>	0.477	0.263	0.303	0.447	0.395
<b>Att2</b>	<b>0.889</b>	0.577	0.315	0.337	0.416	0.383
<b>Att3</b>	<b>0.876</b>	0.482	0.324	0.344	0.485	0.383
<b>Att4</b>	<b>0.870</b>	0.586	0.316	0.287	0.460	0.366
<b>Aut1</b>	0.514	<b>0.842</b>	0.283	0.137	0.268	0.141
<b>Aut3</b>	0.512	<b>0.862</b>	0.335	0.200	0.288	0.245
<b>Aut4</b>	0.509	<b>0.872</b>	0.380	0.218	0.381	0.322
<b>Aut5</b>	0.568	<b>0.887</b>	0.387	0.261	0.438	0.291
<b>Comp1</b>	0.230	0.293	<b>0.807</b>	0.245	0.316	0.241
<b>Comp2</b>	0.250	0.294	<b>0.811</b>	0.193	0.335	0.253
<b>Comp3</b>	0.312	0.340	<b>0.856</b>	0.335	0.344	0.306
<b>Comp4</b>	0.355	0.405	<b>0.776</b>	0.296	0.300	0.316
<b>COO1</b>	0.344	0.232	0.297	<b>0.849</b>	0.264	0.375
<b>COO2</b>	0.349	0.244	0.282	<b>0.904</b>	0.287	0.377
<b>COO3</b>	0.249	0.149	0.274	<b>0.837</b>	0.238	0.373
	<b>Attitude</b>	<b>Autonomy</b>	<b>Competence</b>	<b>Country of origin</b>	<b>Halal food purchase intention</b>	<b>Relatedness</b>

					<b>intention</b>	
<b>Pur1</b>	0.387	0.302	0.282	0.224	<b>0.834</b>	0.311
<b>Pur2</b>	0.481	0.396	0.394	0.279	<b>0.872</b>	0.377
<b>Pur3</b>	0.467	0.353	0.340	0.278	<b>0.868</b>	0.321
<b>Rel1</b>	0.410	0.291	0.231	0.358	0.370	<b>0.776</b>
<b>Rel2</b>	0.357	0.261	0.256	0.328	0.269	<b>0.806</b>
<b>Rel3</b>	0.335	0.195	0.260	0.332	0.312	<b>0.825</b>
<b>Rel4</b>	0.294	0.177	0.253	0.321	0.310	<b>0.779</b>
<b>Rel5</b>	0.326	0.253	0.368	0.367	0.270	<b>0.756</b>

**Fornell-Larcker Criterion**

	<b>Attitude</b>	<b>Autonomy</b>	<b>Competence</b>	<b>Country of origin</b>	<b>Halal food purchase intention</b>	<b>Relatedness</b>
<b>Attitude</b>	<b>0.868</b>					
<b>Autonomy</b>	0.610	<b>0.866</b>				
<b>Competence</b>	0.351	0.408	<b>0.813</b>			
<b>Country of origin</b>	0.366	0.244	0.329	<b>0.864</b>		
<b>Halal food purchase intention</b>	0.522	0.412	0.399	0.306	<b>0.858</b>	
<b>Relatedness</b>	0.440	0.300	0.343	0.433	0.394	<b>0.789</b>

**HTMT Criterion**

	<b>Attitude</b>	<b>Autonomy</b>	<b>Competence</b>	<b>Country of origin</b>	<b>Halal food purchase intention</b>	<b>Relatedness</b>
<b>Attitude</b>						
<b>Autonomy</b>	0.681					
<b>Competence</b>	0.410	0.467				
<b>Country of origin</b>	0.422	0.27	0.397			
<b>Halal food purchase intention</b>	0.603	0.458	0.477	0.366		
<b>Relatedness</b>	0.501	0.329	0.415	0.516	0.462	



## Appendix G Smart PLS Results (Structural Model)

### Inner VIF Values

	Attitude	Autonomy	Competence	COO	Halal food purchase intention	Relatedness
Attitude					1.857	
Autonomy					1.709	
Competence					1.325	
COO					1.332	
Halal food purchase intention						
Relatedness					1.425	

### Outer VIF Values

	VIF
Att1	2.357
Att2	3.083
Att3	2.521
Att4	2.683
Aut1	2.792
Aut3	3.002
Aut4	2.307
Aut5	2.309
COO1	1.804
COO2	2.284
COO3	1.86
Comp1	1.782
Comp2	1.746
Comp3	2.1
Comp4	1.705

<b>Pur1</b>	1.816
<b>Pur2</b>	1.815
<b>Pur3</b>	1.908
<b>Rel1</b>	1.581
<b>Rel2</b>	2.148
<b>Rel3</b>	2.2
<b>Rel4</b>	1.778
<b>Rel5</b>	1.752

### Path Coefficients

	<b>Original Sample (O)</b>	<b>Sample Mean (M)</b>	<b>Standard Deviation (STDEV)</b>	<b>T Statistics ((O/STDEV))</b>	<b>P Values</b>
<b>Attitude -&gt; Halal food purchase intention</b>	0.336	0.335	0.070	4.801	0.000
<b>Autonomy -&gt; Halal food purchase intention</b>	0.081	0.085	0.067	1.207	0.114
<b>Competence -&gt; Halal food purchase intention</b>	0.195	0.196	0.056	3.465	0.000
<b>Relatedness -&gt; Halal food purchase intention</b>	0.155	0.157	0.056	2.770	0.003

### R Square ( $R^2$ )

	<b>R Square (<math>R^2</math>)</b>	<b>R Square Adjusted (<math>R^2</math> Adjusted)</b>
<b>Halal food purchase intention</b>	0.348	0.339

**Predictive Relevance ( $Q^2$ )**

	<b>SSO</b>	<b>SSE</b>	<b><math>Q^2</math> (=1-SSE/SSO)</b>
<b>Attitude</b>	1212	1212	
<b>Autonomy</b>	1212	1212	
<b>Competence</b>	1212	1212	
<b>Halal food purchase intention</b>	909	688.352	0.243
<b>Relatedness</b>	1515	1515	

**Appendix H Smart PLS Results (Moderation Analysis)**

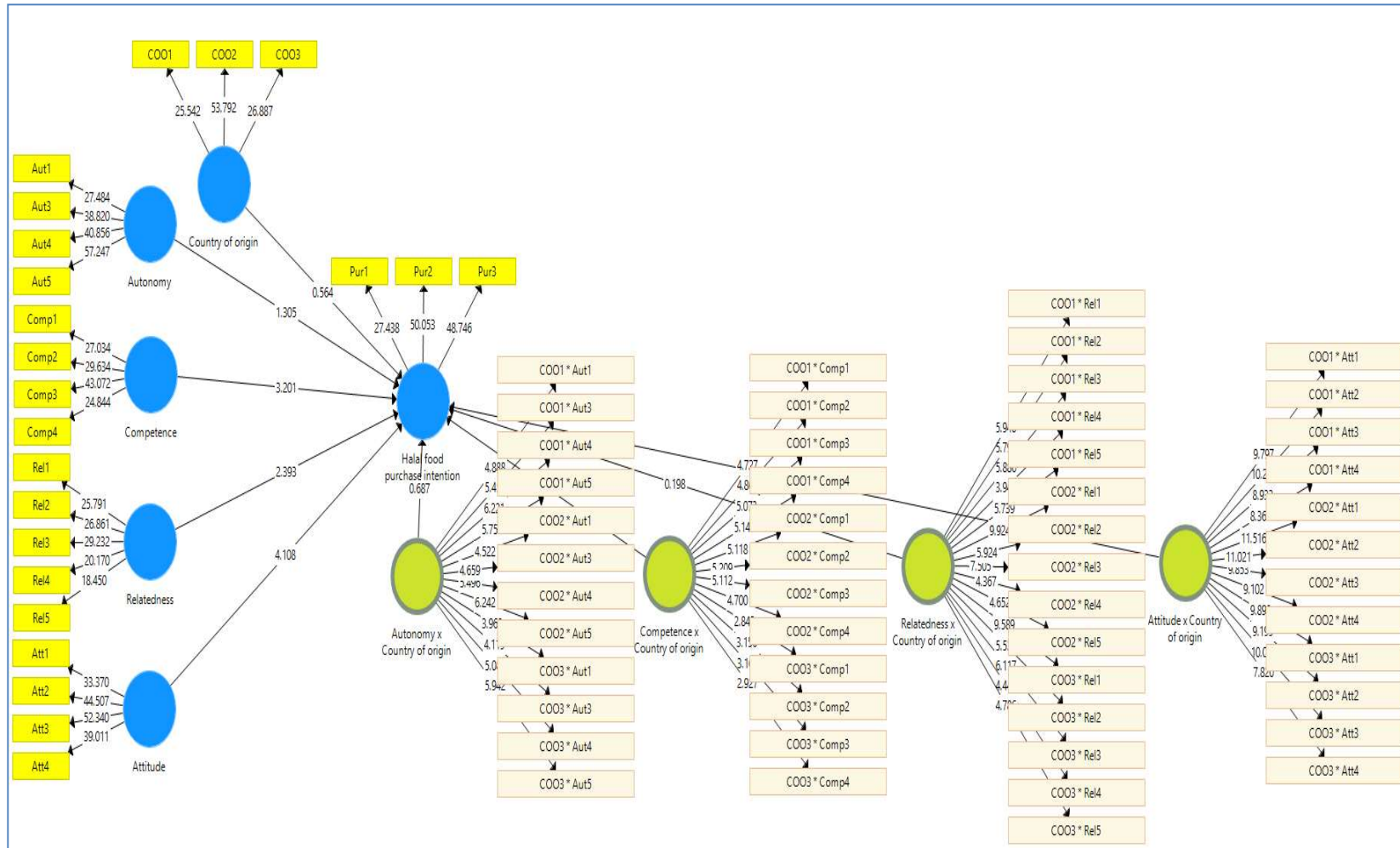
**Main Effect Model (Path Coefficients)**

	<b>Attitude</b>	<b>Autonomy</b>	<b>Competence</b>	<b>COO</b>	<b>Halal food purchase intention</b>	<b>Relatedness</b>
<b>Attitude</b>					0.328	
<b>Autonomy</b>					0.083	
<b>Competence</b>					0.188	
<b>COO</b>					0.042	
<b>Halal food purchase intention</b>						
<b>Relatedness</b>					0.143	

**Main Effect Model ( $R^2$  Values)**

	<b>R Square (<math>R^2</math>)</b>	<b>R Square Adjusted (<math>R^2</math> Adjusted)</b>
<b>Halal food purchase intention</b>	0.349	0.338

### Full Model with Interaction Terms



**Full Model with Interaction Terms (Path Coefficients)**

	Attitude	Attitude x Country of origin	Autonomy	Autonomy x Country of origin	Competence	Competence x Country of origin	Country of origin	Halal food purchase intention	Relatedness x Country of origin	Relatedness
<b>Attitude</b>								0.327		
<b>Attitude x Country of origin</b>								-0.010		
<b>Autonomy</b>								0.086		
<b>Autonomy x Country of origin</b>								0.050		
<b>Competence</b>								0.186		
<b>Competence x Country of origin</b>								-0.050		
<b>Country of origin</b>								0.033		
<b>Halal food purchase intention</b>										

**Full Model ( $R^2$  Values)**

	<b>R Square (<math>R^2</math>)</b>	<b>R Square Adjusted (<math>R^2</math> Adjusted)</b>
<b>Halal food purchase intention</b>	0.352	0.332

**Full Model with Interaction Terms (Bootstrapping Results)**

	<b>Original Sample (O)</b>	<b>Sample Mean (M)</b>	<b>Standard Deviation (STDEV)</b>	<b>T Statistics ( O/STDEV )</b>	<b>P Values</b>
<b>Attitude -&gt; Halal food purchase intention</b>	0.327	0.318	0.080	4.108	0.00
<b>Attitude x Country of origin -&gt; Halal food purchase intention</b>	-0.010	0.002	0.065	0.157	0.438
<b>Autonomy -&gt; Halal food purchase intention</b>	0.086	0.087	0.066	1.305	0.096
<b>Autonomy x Country of origin -&gt; Halal food purchase intention</b>	0.050	0.034	0.073	0.687	0.246
<b>Competence -&gt; Halal food purchase intention</b>	0.186	0.188	0.058	3.201	0.001
<b>Competence x Country of origin -&gt; Halal food purchase intention</b>	-0.050	-0.069	0.062	0.812	0.208
<b>Country of origin -&gt; Halal food purchase intention</b>	0.033	0.032	0.059	0.564	0.286
<b>Relatedness -&gt; Halal food purchase intention</b>	0.143	0.144	0.060	2.393	0.008
<b>Relatedness x Country of origin -&gt; Halal food purchase intention</b>	-0.012	-0.033	0.058	0.198	0.422

## LIST OF PUBLICATIONS

### Journal with Impact Factor

1. Syed, S., Ahmad, F. Sh., & Shah, S. R. H. (2022). Psychological needs as underlying forces of halal food purchase intention. Ahead of print in *Journal of Islamic Marketing*. **(Indexed by Scopus, Web of Science (ESCI), ABDC; Q2, IF: 3.70)**

### Indexed Journal

1. Syed, S., Ahmad, F. Sh., & Shah, S. R. H. (2022). The influence of attitude on consumers' autonomy to make halal food purchase intention: An overview of self-determination in a collectivist culture. *International Business Research*, 15(3), 75-84. **(Indexed by Excellent for Research in Australia (ERA))**

### Non-indexed Journal

1. Syed, S., Ahmad, F. S., & Shah, S. R. (2021). Tapping into food industry: A comparative dual-model study of religion and culture on food products' purchase intention. *Journal of Mediterranean Tourism Research*, 1(1), 1-11.
2. Syed, S., Shah, S. R., & Ahmad, F. S. (2021). The Influence of Intrinsic Motivational Forces on Consumers' Product Purchase Intentions. *Journal of Mediterranean Tourism Research*, 1(2), 70-80.

### Indexed Conference Proceedings

1. Syed, S., Ahmad, F. Sh. & Shah, S. R. H. (2021). Basic psychological needs as drivers of Halal food purchase intention. Paper presented at 3<sup>rd</sup> Asia Conference on Business and Economic Studies (ACBES 2021) by *Journal of Asian Business and Economic Studies*, 27<sup>th</sup> -28<sup>th</sup> August, 2021. Ho Chi Minh City, Vietnam. **(Indexed by Web of Science)**