

Evaluation of Halal Food Purchase Intention in Germany

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Abstract

Today Turkish immigrants in Germany draw attention as entrepreneurs and consumers. As their consumption potential has increased, they have become target market for both Turkish and German firms. Investigation of Muslim Turkish immigrants' halal food purchase behavior is important for both researchers and firms. In this paper, the role played by habits and religiousness as well as attitudes, subjective norms and perceived behavioral control towards halal food on the intention to consume halal food is examined to investigate Muslim Turkish migrants' intentions in Germany to purchase halal food. The Theory of Planned Behavior was used to determine their intentions to consume halal food. The first research model revealed the role of cognitive, behavioral and emotional religiousness, attitudes, subjective norms and perceived behavioral control to find out Muslim Turkish migrants' intention to purchase halal food. In the second research model, the effects of habits on purchasing halal food and of attitudes, subjective norms and perceived behavioral control that affect the intention on the intention to purchase halal food were analyzed. As a result of the two models used in this study, migrants' attitudes towards halal food consumption, their subjective norms, religiousness with its behavioral and emotional dimensions, and habits were identified to influence their intentions to consume halal food.

Keywords: Halal Food, Religiousness, Habits, Theory of Planned Behavior, Muslim Turkish Immigrants

1. Introduction

Muslims constitute a dominant population in a total number of 50 countries in Asia, Europe and Africa (Alserhan, 2010). There are approximately 13 million Muslims in Western Europe. The origins of this population are in Northern Africa, Turkey, the Balkans and India. Muslim populations in some European countries are above 10%. Thus, Muslims in these regions constitute a significant market segment (Bonne and Verbeke, 2008).

The necessity of the food's being halal which is consumed by Muslim consumers in multi-religious societies is of great importance. Environmental factors are very important for Muslims. Although religiousness is the main underlying factor for Muslims to consume halal food, this subject should be discussed in detail.

Muslims living in multi-cultural societies, in which there are cultural, ethnic and religious differences, encounter various obstacles in terms of consumption. The consumption sensitivity of Muslims, which develops based on environmental obstacles, varies depending on religion or the level of religiousness. While some Muslims see no harm in consuming halal food in restaurants that also sell alcoholic or pork products, some other do their shopping from the supermarkets or grocery stores that only sell halal food (Wilson and Liu, 2010).

In almost all religions, there are prohibitions and exemptions regarding various matters and behaviors for individuals who are members of the relevant religions. The influence of religion especially on food products can be shaped according to both the religion itself and the members of that religion (Bonne and Verbeke, 2008). For example, Muslim consumers consume halal food to comply with the rules of their religion. While Islam and Judaism prohibit the consumption of pork and alcoholic products, Hinduism and Buddhism prohibit the consumption of cow meat as well as pork meat. The only religion which does not have any prohibitions regarding the consumption of food products is Christianity. The prohibitions imposed by religions regarding food products are not fully complied by the followers of these religions. In a study conducted in the US, it has been found that only 90% of Buddhists and Hindus, 16% of Jews and 76% of Muslims comply with the prohibitions imposed by these religions regarding the relevant matter (Bonne and Verbeke, 2008; Lada et.al., 2009). Islamic food rules are based on the concepts of "halal" and "haram". Halal and haram have opposite meanings. "Halal" is an Arabic word and refers to legal, lawful and permissible. The word "haram", the opposite meaning of halal, refers to illegal, unlawful and forbidden. All food

except for the ones considered haram are considered as halal in Quran (Bonne and Verbeke, 2008). It was mentioned in many verses of the Quran that the consumption of some food and drinks is haram as well as the reasons for the prohibition. As to the Quran, all hygienic food is suitable for the consumption. The food, which is forbidden to consume, was also explained in detail (Mohamed Nasir and Pereira, 2008). Halal food rules divide food into two as halal and haram. Some products are between halal and haram, and named as “makruh” (Regenstein et. al., 2003). The term “haram” is not only used for food, but also for food additives, cosmetics and personal care products (Koluman, 2009). Muslims are responsible for consuming the food, of which they are sure is halal. In general, Islamic rules regarding whether food is halal are discussed in 5 groups.

1. Animals forbidden to eat
2. Prohibition of blood
3. Dhabihah
4. Prohibition of pork meat
5. Prohibition of alcohol

The aim of this study is to reveal the role played by habits and religiousness as well as attitudes, subjective norms and perceived behavioral control towards halal food on the intentions of Muslim Turkish migrants in Germany to consume halal food using two different models. The main reason for the inclusion of Muslim Turkish migrants in Germany in the research is that 99,2% of the population in Turkey is Muslim and the perception of consumers regarding halal food is at low level such as 30%. Therefore, the general opinion of the consumers in Turkey, where the majority of population is Muslim, is that halal certification is not necessary. The most important underlying reason for this opinion is the assumption that the food sold in a country where mostly Muslims live would not have features that are not halal.

2. Literature and Hypotheses

In the research, the intentions of Muslim Turkish migrants in Germany to halal food purchase intention were measured based on the The Theory of Planned Behavior using two different models, in which the dimensions of religiousness and habits were included separately. In literature review, the intention to purchase halal food was examined according to The Theory

of Planned Behavior and then, the dimensions of religiousness and habits were included using each model.

2.1 The Theory of Planned Behavior Regarding the Intention to Purchase Halal Food

Attitude is evaluated in performing a specific behavior including an attitude such as purchasing a product. Attitudes refer to the degree of positive or negative evaluation of a behavior questioned by an individual. If an individual believes that performing a behavior will lead to positive results, s/he will have a positive attitude towards this behavior. On the contrary, if an individual believes that performing a behavior will lead to negative results, s/he will have negative attitude towards this behavior. In general, beliefs towards an object are formed by being associated with some features, characteristics or qualifications. Alam and Sayuti (2011) found a positive and significant relationship between the attitude developed by an individual and the intention to purchase halal food. In the same study, the Theory of Planned Behavior explained the intention to purchase halal food with a ratio of 29,1%. Attitude is considered as an important element that affects the consumer intention to purchase halal food because the consumers, who have high levels of positive attitudes towards halal food, have high levels of intentions to purchase halal products. This finding consolidates the situation of Ajzen (1988), in which attitude can be defined as an important element in predicting and defining human behavior, and the hypothesis which describes the relationship between attitude and purchasing halal food is given below.

H₁: The attitudes towards halal food have a positive effect on the intention to purchase halal food.

The second important determinant of the intention is subjective norms. It is a belief as to whether certain individuals or groups will approve the performance of a behavior (Ajzen and Fishbein, 1980). These individuals or groups are named as reference groups since they serve as a reference point in terms of guiding behaviors. For many behaviors, these reference groups comprise the family, friends or colleagues of an individual. In general, if an individual believes that reference groups, which are important for himself/herself, think s/he should perform the relevant behavior, s/he will perceive a social pressure about performing the behavior. Nevertheless, if an individual believes that these reference groups do not approve the behavior, this will cause the individual to form a subjective norm in way to avoid performing such behavior. If purchasing halal food is a socially desired behavior, the probability of an individual who takes into account of the opinions of the other individuals of

society to purchase halal food will be higher. Subjective norm is a social pressure perceived in the consumer decisions to purchase halal food (Alam and Sayuti, 2011). In the study in which Muslims' who live in France; attitudes towards purchasing halal food are analysed, Bonne et al (2007) found out that attitudes, subjective norms and perceived behavioral control are vital. Lada et al. (2009) revealed the importance of subjective norms in affecting intentions. Lada et al. (2009) found in the research they conducted that subjective norms are a function of the beliefs of individuals, who feel they belong to a group and perform a certain behavior according to the norms of that group, just like in halal food consumption. Bonne et al. (2007) found out a positive and significant relationship between subjective norms and intentions in the research they carried out. Especially in Western societies with a more individualistic culture, people continue to live on their own independently from groups and use their personal attitudes more in deciding behaviors to achieve their personal goals compared to social norms. On the contrary, in societies with collectivist cultures such as Islamic societies, individuals cannot perceive themselves as independent from the group, to which they are members, and prioritize group goals rather than individual goals and act together in order to achieve these goals (Karijin et al., 2007). Based on the findings obtained by Karijin et al. (2007), one of the most important factors, which have an influence on the consumer intentions of Muslim Turkish migrants, who live in Germany and have a structure of collectivist ethnic group, to purchase and their behaviors, can be said to be subjective norms. In this context, the following hypothesis was formed.

H₂: The subjective norms regarding halal food have a positive effect on the intention to purchase halal food.

Perceived behavioral control refers to the extent of ease or difficulty perceived by an individual in performing a behavior. It is the belief of an individual as to the extent of control s/he has in performing such behavior (Ajzen, 1991). The level of perceived behavioral control is assessed rating the frequency of the formation of factors that facilitate or suppress the performance of a behavior. These factors are internal control (information, personal insufficiency, skills, emotions) and external control (opportunities, commitment to others, barriers). The more resources and opportunities an individual has and the less s/he encounters obstacles, the greater the perceived control of that individual on such behavior is. Khairi et al., (2012) revealed in the research they conducted that the higher the control perceived by an individual on purchasing halal food is, the higher the intention of that individual to purchase

halal food is. It depends on the extent of the control a Muslim feels on the intention to accept halal products. The extent of the perceived behavioral control has a positive influence on the intention to accept the products approved by the religion in religious groups especially with a collectivist structure (Abd Rahim and Junos, 2012). In this context, the following hypothesis was formed.

H₃: The behavioral control on halal food has a positive effect on the intention to purchase halal food.

2.2 The First Model: Religiousness in the Intention to Purchase Halal Food

When examining the role of religion, it is of great importance to measure the subjective intensity of a religion at individual level. The intensity of the religious belief of an individual refers to the religiousness of that individual. The literature has two different approaches in measuring religiousness. In the first approach, Allport and Ross (1967) measured religiousness in two dimensions, which are introvert and extrovert. Although religiousness used to be considered as a unidimensional structure which included the participation / contribution of an individual in / to a religion, researches revealed that unidimensionality was insufficient in interpreting religion in a comprehensible manner (Bergan, 2001; Kennedy and Lawton, 1998). In the second approach, religiousness was indicated to be a three-dimensional structure composed of thought, behavior and emotion. The main aim of this approach is to measure responses in the dimensions of thought, behavior and emotion as an expression of the evaluation made by an individual towards an intention (Onay, 2001). In two-dimensional structure, introvert religiousness refers to the meaning of life whereas extrovert religiousness refers to a social order (Donahue, 1985). In three-dimensional structure, “the dimension of thought” refers to the faith of an individual in God and his/her acceptances derived from this faith; “the dimension of behavior” refers to all kinds of practices performed by an individual because of his/her faith such as performing the salaah, going to church, fasting, going on pilgrimage; “the dimension of emotion” refers to the psychological status of an individual regarding his/her faith and practices, the expectations of success, protection and heaven from God or concerns about troubles, punishment and hell. In fact, the dimension of introvert religiousness in the two-dimensional approach of religiousness corresponds to the dimension of thought in the three-dimensional approach whereas the dimension of extrovert religiousness corresponds to the dimension of behavior. It is therefore thought that the dimensions of thought, behavior and emotion are effective in the intensity of religiousness.

Attitude, one of the basic subjects of social psychology, comprises three different dimensions: thought (thoughts and beliefs towards the object of attitude), emotion (emotional reactions towards the object of attitude) and behavior (types of behaviors towards the object of attitude). These dimensions are also called cognitive, emotion or behavior-based attitudes. For example, the behavioral dimension of the attitude of an individual towards the object of attitude is evaluated according to the behaviors s/he has performed so far (Aronson et al., 2010). Under normal circumstances, attitude is assumed to be associated and in compliance with these three components. For example, if an individual has positive opinions about religion, this individual is thought to have positive emotions towards religious behaviors or religion. As mentioned in Islam earlier, food such as alcohol and pork meat are considered as haram and prohibited according to the Islamic law. Religious commitments, religiousness and religious beliefs certainly affect the emotions and attitudes of individuals towards purchasing and consumption (Jamal, 2003). Bonne and Verbeke (2006) revealed that religion is one of the most important motivational tools in halal food consumption. When religiousness is used as an independent variable, the dimensions of behavior, thought and emotion which constitute religiousness play a strong role in predicting the intention to choose halal food. Behavioral beliefs such as purchasing or consuming halal products are beliefs that motivate the attitude of an individual towards a behavior (Lada, et.al., 2009). Within the framework of the studies conducted on the subject, the hypotheses, which describe the relationships between the dimensions of religiousness and the intention of an individual to choose halal food, attitudes that affect intentions, subjective norms and perceived behavioral control are given below.

H₄:The cognitive dimension of religiousness has a positive effect on attitudes towards halal food.

H₅:The cognitive dimension of religiousness has a positive effect on subjective norms regarding halal food.

H₆:The cognitive dimension of religiousness has a positive effect on perceived behavioral control on halal food.

H₇:The behavioral dimension of religiousness has a positive effect on attitudes towards halal food.

H₈:The behavioral dimension of religiousness has a positive effect on subjective norms regarding halal food.

H₉:The behavioral dimension of religiousness has a positive effect on perceived behavioral control on halal food.

H₁₀:The emotional dimension of religiousness has a positive effect on attitudes towards halal food.

H₁₁:The emotional dimension of religiousness has a positive effect on subjective norms regarding halal food.

H₁₂:The emotional dimension of religiousness has a positive effect on perceived behavioral control on halal food.

H₁₃:The cognitive dimension of religiousness has a positive effect on the intention to purchase halal food.

H₁₄:The behavioral dimension of religiousness has a positive effect on the intention to purchase halal food.

H₁₅:The emotional dimension of religiousness has a positive effect on the intention to purchase halal food.

2.3 The Second Model: Habits in the Intention to Consume Halal Food

According to some researchers, habits refer to the process, by which an act that is primarily performed with difficulty by an individual becomes easier to be performed over time, and finally is performed semi-mechanically or almost without realizing after sufficient amount of practices performed. According to scientists, the reason for the emergence of habits is that brain always looks for new ways to save energy because habits help brain make less effort. Therefore, brain attempts to turn almost all routines to habits if left on its own. An efficient brain allows to avoid non-stop thinking about basic behaviors such as what to eat or drink (Duhigg, 2012). Habits are defined as the process, by which an act is performed unconsciously and automatically. Conner and Armitage (1998) suggested the inclusion of habit measurement in the Theory of Planned Behavior as a determinant of behavior. Habit was successfully used as a determinant of intention in some studies conducted on food consumption using the Theory of Planned Behavior (Verbeke, et al., 2004; Honkanen, et al., 2005). Muslim consumers regard halal food consumption as an automatic and customary process (Bonne, et al. 2009). Bonne, et al. (2007) and Bonne, et al. (2009) used habit in their models as a determinant of the intention to consume halal food in the studies conducted. In this context, the following hypotheses were formulated.

H₁₆: Habits have a positive effect on attitudes towards halal food.

H₁₇: Habits have a positive effect on subjective norms regarding halal food.

H₁₈: Habits have a positive effect on perceived behavioral control on halal food.

H₁₉: Habits have a positive effect on the intention to purchase halal food.

3. Method

3.1 Measures

Four questions sought information on respondents' gender, age, income, and educational level.

The Religiosity scale used in the present research was developed by Onay (2002) and designed to measure three dimensions: (a) cognitive, (b) behavioral and (3) emotional (Participants responded on a five-point Likert scale from 1 =strongly disagree to 5=strongly agree. Factor analyses conducted in this study revealed exactly the three dimensions with the associated items as expected (Sevim, et. al, 2016). Cronbach's alpha reliability of the "Behavioral Dimension of Religiosity", "Emotional Dimension of Religiosity", and "Cognitive Dimension of Religiosity" were, respectively, .88, .83, and .88; with the overall reliability across dimensions being .93. To measure the Turkish immigrants', who live in Germany, the habit of purchasing halal food, habit scale was used. (Bonne, et al., 2007; Bonne, et al. 2009; Honnaken, et al. 2005). Cronbach's alpha reliability of habit scale value was 0.97. The halal food purchase intentions of Muslim Turkish migrants in Germany to were measured based on The Theory of Planned Behavior (Bonne et.al., 2007; Alam and Sayuti, 2011; Bonne, et.al. 2009). Cronbach's alpha reliability value of The Theory of Planned Behavior scale was 0.94.

3.2 Sample Characteristics

The population of the research, using the convenience sampling method, is composed of the Turkish immigrants living in the city of Cologne in Germany. According to the 2016 official figures, 1.024.346 persons live in Cologne which is one of the largest cities in Germany where the population is increasing. In the city, where 17% of the population is foreigners, there are 64.592 Turkish citizens (koln.bk.mfa.gov.tr). In this study, all those who were born as Turkish citizens and their children and grandchildren are accepted as Turkish immigrants. Taking this into account, the number of Turkish origin immigrants in the city is estimated to

be approximately one hundred thousand. Considering the return ratio, 538 surveys have been distributed and 400 of the returned surveys have been analyzed.

As can be seen from Table 1; 51.9% of the research respondents are male and 48.1% are female immigrants. 14.8% of the participants were in the age group of 18-24Y, 10.1% between 25-30Y, 14.3% between 31-35Y, 31.7% between 36-45Y, 19.1% between 46-55Y, 7% between 56-65Y and 3% were 66Y or above. 25.8% of the participants reported having a mean monthly income of 1500€ or less, 51.2% earned between 1501-3000€, 17.9% earned between 3001-4500€, 3.3% earned between 4501-6000€ and 1.8% had 6001€ or more. About 50% of the participants had studied in educational institutions in Turkey and the rest had studied in educational institutions in Germany.

Table- 1. Demographics Characteristics of the Respondents
(n=400)

<i>Variables</i>		<i>Frequen cy</i>	<i>(%)</i>
Gender	Female	193	48.1
	Male	207	51.9
Age Group	18-24	59	14.8
	25-30	40	10.1
	31-35	57	14.3
	36-45	126	31.7
	46-55	76	19.1
	56-65	28	7
	66 and above	12	3
Monthly Income	1.501 € and less	101	25.8
	1.501 € - 3.000€	200	51.2
	3.001 € - 4.500€	70	17.9
	4.501 € - 6.000€	13	3.3
	6.001 € and above	7	1.8
Education Status in Turkey	Elementary School	77	12.2
	Secondary School	53	13.4
	High School	52	13.1
	University	35	8.8
Education Status in Germany	Hauptshule - Realschule	95	23.9
	Gymnasium	25	6.3
	Universtad/Fachhoc hschl	65	16.4

3.3 Data Analysis

Research models that are fundamental to study are conducted Structural Equation Modeling (SEM). In this study, the two-step procedure was used to ensure an adequate measurement and structural model. To assess measurement validity, confirmatory factor analyses (CFA) were run with LISREL 8.51.

In the models which have normal data distribution and the relations between variances are relatively high, the item number which is ten times of the monitored variance number is taken as sufficient (Şimşek, 2007).

4. Research Findings

4.1 Confirmatory Factor Analysis of the First Measurement Method

CFA was used to determine the convergent and discriminant validity of the measurement scales. CFA values related to 27 observed items which represent 7 latent constructs within the measurement of the model.

When the goodness of fit values which are obtained with CFA are analysed, measurement scale results in accordance with the analysis (Schermelleh-Engel et. al., 2003). Along with goodness of fit index, standardized beta (higher than 0.50) and t values ($t > 2.57$) are looked into and for all the variants within the scope of measurement scale meaningful results are acquired at the 0.01 level. In this step of the analysis, the factor loadings of three items (COG1, COG2, COG3) were not higher than the recommended level of 0.70 (Lin, 2011). Because COG1, COG2, COG3, COG4 items had high covariance of error terms (Dölarslan, 2014), latent construct that is named as COG in this study was omitted from the model. The CFA results of the first measurement model with the remaining 23 items are shown in Table 2.

All factor loadings were statistically significant ($p < 0.01$). The goodness-of-fit indicators of the measurement model are as follows: χ^2 : 497.65; df: 296, $p < 0.05$; root meansquare error of approximation (RMSEA): 0.035; normed fit index (NFI): 0.95; comparative fit index (CFI): 0.98; goodness of fit index (GFI): 0.92 and adjusted goodness of fit index (AGFI): 0.89. All goodness-of-fit indicators are within recommended limits.

Additionally, composite reliability (CR) and average variance extracted (AVE) values were calculated to test the validity of scales for the data. The construct reliability values of the six constructs ranged from 0.91 to 0.98 and exceeded the critical value of 0.70 (Hair et al., 1998), indicating a satisfactory estimation. In this study, the AVE values for six constructs exceeded

0.50. As seen from Table. 2, these results show that the measurement model has a convergent validity.

Table- 2 Statistical Result of First Measurement Model

Construct (Latent Constructs)	Items	Standardized		Standard errors	CR	AVE
		loadings (β)	<i>t</i> - values			
BEHV	BEHV1	0.81	19.30	0.34	0.91	0.63
	BEHV2	0.88	21.90	0.23		
	BEHV3	0.78	18.21	0.39		
	BEHV4	0.82	19.41	0.33		
	BEHV5	0.72	16.10	0.49		
	BEHV6	0.77	18.01	0.40		
EMO	EMO 1	0.88	21.95	0.23	0.92	0.74
	EMO 2	0.79	18.82	0.37		
	EMO 3	0.92	23.96	0.15		
	EMO 4	0.86	21.24	0.26		
PDC	PDC1	0.98	21.32	0.04	0.94	0.89
	PDC2	0.91	19.47	0.18		
ATT	ATT1	0.91	23.41	0.17	0.94	0.86
	ATT2	0.96	25.85	0.08		
	ATT3	0.91	23.54	0.16		
SN	SN1	0.76	17.85	0.42	0.92	0.71
	SN2	0.94	24.77	0.12		
	SN3	0.87	21.67	0.25		
	SN4	0.89	22.63	0.21		
	SN5	0.74	17.13	0.45		
INT	INT1	0.99	27.59	0.02	0.98	0.95
	INT2	0.98	27.19	0.03		
	INT3	0.96	26.06	0.08		

Fit statics: $p < 0.05$, $\chi^2 = 497.65$, $df = 296$, $\chi^2/sd = 1.68$, RMSEA = 0.035, NFI = 0.95, NNFI = 0.98, CFI = 0.98, IFI = 0.98, GFI = 0.92, AGFI = 0.89, SRMR = 0.035.

4.2 Testing the Structural Model for First Model

The values that are gained by testing the structural model which constates the direct relation that the study consists are given in Table 3. With the analysis results, it is observed that all the relations are at the level of 0.01 which is meaningful and model goodness of fit values are acceptable except four relations (Schermelleh-Engel et al., 2003).

To identify the fit of the structural model, the goodness-of-fit statistics of the first model were assessed: $p < 0.05$, $\chi^2:417.60$, $sd:213$, $\chi^2/sd: 1.96$, RMSEA: 0.049, NFI:0.96, NNFI: 0.97,

CFI: 0.98, IFI: 0.98, GFI :0.92, AGFI:0.89, SRMR: 0.04. Because the results showed an acceptable model fit, it was concluded that the model fits the data reasonably well.

H₄, H₅ H₆ and H₁₃ hypotheses are not included in the structural model since COG latent construct is taken out of the model due to the CFA results. H₁-H₂-H₇-H₈-H₉-H₁₀ and H₁₁ which consist the effects on the model are supported. However this is not the case for H₃-H₁₂-H₁₄ and H₁₅ hypotheses (Table 3). Also, it is clear that the research model explains the intention for purchasing halal food at 0.78 level.

Table -3 Path Relationships and Goodness of Fit Values for the First Model

Hypotheses	Path relationships	β	t-value	Results	Extracted Value
H ₁	ATT->INT	0.27	4.79**	Supported	R ² _{INT} =0.78
H ₂	SN->INT	0.67	10.11**	Supported	
H ₃	PDC->INT	-0.05	-1.87	Not Supported	
H ₇	BEHV->ATT	0.22	2.94**	Supported	
H ₈	BEHV->SN	0.38	5.03**	Supported	
H ₉	BEHV->PDC	0.36	4.39**	Supported	
H ₁₀	EMO->ATT	0.32	4.21**	Supported	
H ₁₁	EMO> SN	0.22	2.93**	Supported	
H ₁₂	EMO-> PDC	-0.01	-0.11	Not Supported	
H ₁₄	BEHV->INT	0.07	-1.65	Not Supported	
H ₁₅	EMO->INT	0.03	0.79	Not Supported	

Fit statistics: $p < 0.05$, $\chi^2 = 417.60$, $df = 213$, $\chi^2/sd = 1.96$, RMSEA = 0.049, NFI = 0.96, NNFI = 0.97, CFI = 0.98, IFI = 0.98, GFI = 0.92, AGFI = 0.89, SRMR = 0.04. * $p < 0.05$; ** $p < 0.01$

4.3 Confirmatory Factor Analysis of the Second Measurement Method

CFA was used to determine the convergent and discriminant validity of the measurement scales. CFA values related to 18 observed items which represent 5 latent constructs within the measurement of the model (Table. 4). When the goodness of fit values which are obtained with CFA are analysed, measurement scale results in accordance with the analysis (Schermelleh-Engel et.al., 2003). With goodness of fit indexes, standardized beta (above 0.50) and t values ($t > 2.576$) are looked into and for all the variables which are within the measurement scale, meaningful results are obtained at 0.01 level.

Table- 4 Statistical Result of First Second Measurement Model

Construct (Latent Constructs)	Items	Standardized loadings (β)	t-values	Standard errors	CR	AVE
HAB	HAB 1	0.92	19.30	0.34	0.92	0.70
	HAB 2	0.94	21.90	0.23		
	HAB 3	0.98	18.21	0.39		
	HAB 4	0.93	19.41	0.33		
	HAB 5	0.89	16.10	0.49		
PDC	PDC 1	0.99	21.32	0.04	0.94	0.89
	PDC 2	0.90	19.47	0.18		
ATT	ATT 1	0.89	23.41	0.20	0.94	0.83
	ATT 2	0.98	25.85	0.05		
	ATT 3	0.90	23.54	0.19		
SN	SN 1	0.78	17.85	0.39	0.92	0.70
	SN 2	0.92	24.77	0.16		
	SN 3	0.88	21.67	0.23		
	SN 4	0.86	22.63	0.25		
	SN 5	0.75	17.13	0.44		
INT	INT 1	0.99	27.59	0.02	0.98	0.95
	INT 2	0.98	27.19	0.04		
	INT 3	0.96	26.06	0.08		

Fit statics: $p < 0.05$, $\chi^2 = 210.80$, $df = 120$, $\chi^2/sd = 1.75$, $RMSEA = 0.04$, $NFI = 0.98$, $NNFI = 0.99$,
 $CFI = 0.99$, $IFI = 0.99$, $GFI = 0.94$, $AGFI = 0.89$, $SRMR = 0.022$.

The goodness-of-fit indicators of the second measurement model are as follows: $p < 0.05$; χ^2 : 210.80, df :120, χ^2/sd :1.75, $RMSEA$:0.04, NFI :0.98, $NNFI$:0.99, CFI : 0.99, IFI : 0.99, GFI : 0.94, $AGFI$:0.89, $SRMR$: 0.022. All goodness-of-fit indicators are within recommended limits.

Moreover, composite reliability (CR) and average variance extracted (AVE) values were calculated to test the validity of scales for the data. The construct reliability values of the six constructs ranged from 0.92 to 0.98 and exceeded the critical value of 0.70 (Hair et al., 1998), indicating a satisfactory estimation. In this study, the AVE for five constructs exceeded 0.50 (Table 4). These results of AVE values show that the measurement model has a convergent validity.

4.4 Testing the Structural Model for Second Model

After confirming the measurement models, the structural second model was examined. The results of the standardized parameter estimates and t-values are reported in the Table.4. The

goodness-of-fit indicators of the structural model are as follows: Goodness of fit values: $p < 0.05$, $\chi^2:417,60$, $df:213$, $\chi^2/sd: 1.96$, RMSEA: 0.049, NFI: 0.96, NNFI:0.97, CFI: 0.98, IFI:0.98, GFI: 0.92, AGFI: 0.89, SRMR: 0.04. $p < 0.05$. These results showed that the goodness-of-fit indicators of structural model reasonably well and acceptable.

Table- 5 Path Relationships and Goodness of Fit Values for the Second Model

Hypotheses	Path relationships	β	t-value	Results	Extracted Value
H ₁	ATT->INT	0.27	3.24**	Supported	R ² _{INT} =0.81
H ₂	SN->INT	0.67	10.52	Supported	
H ₃	PDC->INT	-0.04	-1.47	Not	
H ₁₅	HAB->ATT	0.41	8.15**	Supported	
				Supported	
H ₁₆	HAB->SN	0.39	7.43**	Supported	
H ₁₇	HAB->PDC	-0.01	-0.13	Not	
				Supported	
H ₁₈	HAB->INT	0.09	3.30**	Supported	

Goodness of fit values: $p < 0.05$, $\chi^2 = 417,60$, Exemption Level (sd) = 213, $\chi^2/sd = 1.96$, RMSEA = 0.049, NFI = 0.96, NNFI = 0.97, CFI = 0.98, IFI = 0.98, GFI = 0.92, AGFI = 0.89, SRMR = 0.04.

* $p < 0.05$; ** $p < 0.01$

As shown Table 5, attitude and subjective norm have a significant influence on intention, supporting H₁ and H₃. Habit has significant influence on attitude, subjective norm and intention that H₁₅ H₁₆ and H₁₈ are supported. On the other hand, it was found that perceived behavioral control does not have a significant effect on intention, thus H₃ hypothesis is rejected (Table 5). Because of habit does not have a significant effect on perceived behavioral control, H₁₇ is not supported. The research model also explains the intention for purchasing halal food at 0.81 level.

5. Conclusion

The role played by habits and religiousness as well as attitudes, subjective norms and perceived behavioral control towards halal food on the intention to consume halal food is examined to investigate Muslim Turkish migrants' intentions in Germany to purchase halal food. The Theory of Planned Behavior was used to determine their intentions to consume halal food. Two research models were created for this aim. The first research model revealed the role of cognitive, behavioral and emotional religiousness, attitudes, subjective norms and perceived behavioral control to find out Muslim Turkish migrants' intention to purchase halal food. In the second research model, the effects of habits on purchasing halal food and of

attitudes, subjective norms and perceived behavioral control that affect the intention on the intention to purchase halal food were analyzed.

Regarding the first research model, the findings showed that the behavioral dimension of religiousness has a positive effect on the Muslim Turkish migrants' attitudes towards purchasing halal food, perceived behavioral control and subjective norms. Just like the behavioral dimension of religiousness, the emotional dimension of religiousness has also affected attitudes towards the intention to purchase halal food and subjective norms positively. These findings are consistent with the relevant literature (Karijin et al., 2007; Lada et al, 2009; Abd Rahim and Junos, 2012; Ali et al. 2017). The behavioral dimension of religiousness includes behavioral beliefs that motivate the attitude of an individual towards a behavior, such as purchasing or consuming halal products (Lada et al., 2009). In societies with collectivist cultures like Islamic societies (Phalet and Güngör, 2004; Modood et al. 1997), individuals cannot perceive themselves as being independent from the group, to which they are members, and prioritize group goals rather than individual goals and act together to achieve their goals (Karijin et al., 2007). Based on the findings obtained by Karijin et al. (2007), one of the most important factors, which have an influence on the Muslim Turkish migrants' consumer intentions, who live in Germany and have a structure of collectivist ethnic group, to purchase and their behaviors, could be said to be subjective norms. In the present research, according to the Theory of Planned Behavior, the attitudes and subjective norms have been found to have a positive effect on the intentions to purchase halal food in the studies carried out to examine the attitudes of Muslims in France towards purchasing halal food. This result is in line with the previous research findings that reveal the importance of attitudes, subjective norms and perceived behavioral control in the intentions to consume halal food (Bonne et al., 2007). The results of the analysis show that the perceived behavioral control does not have any effect on the intention to purchase halal food. If an individual has the resources required to perform a certain behavior, his/her behavioral intentions will be strong (Song, 2010). This has led to a negative effect on access to halal food, material and timewise costs and the perceived behavioral control of migrants.

The findings in the second research model indicate that habits have a positive effect on the attitude towards halal food, subjective norms and the intention to purchase halal food. The results of the analysis show that habits do not have any effect on the perceived behavioral control, and similarly, the perceived behavioral control does not have any effect on the

intention to purchase halal food. It is assumed in the literature that habits play an important role in understanding the recurring behaviors, such as food consumption. Muslim consumers regard halal food consumption as an automatic and customary process (Bonne et al. 2009). Using Theory of Planned Behavior, Verbeke and Vackier (2005) found out that habits are a strong determinant of fish consumption in the model and habits together to explain the behavior of fish consumption. All in all, as a result of the two models used in this study, migrants' attitudes towards halal food consumption, their subjective norms, religiousness with its behavioral and emotional dimensions, and habits were identified to influence their intentions to consume halal food.

The present study has some limitations despite its contributions towards practices and the literature in terms of revealing the factors that affect the Muslim Turkish migrants' intentions in Germany to purchase halal food. The first limitation is that religiousness and habits are included in the Theory of Planned Behavior as a determinant of the intention to purchase halal food. A different study could be conducted in the future considering the factors of generation, ability to use the language of the host country and food acculturation. The second limitation is that the field study of the research was carried out in Cologne. Other Muslim migrants in other West European countries may also be investigated in the future research.

This research provides insightful contributions to theory and practice. Today, Muslims demand halal labeled manufactured food, which requires marketing experts, certification agencies and politicians to analyze halal food consumption better. Future Research on this subject is needed for businesses as well as academia because of the increasing competitiveness in the halal food market in recent years around the world and in Europe. It is therefore of great importance to examine the consumers' behavior in the relevant market and develop marketing strategies according to these results. Religion and the level of religious commitment are a very useful segmentation variable to divide the market, in which Muslim migrants are dominant. (Aaker and Fournier, 1995). From this point of view, Islam, the second largest religion in Germany, constitutes a different market segment especially due to its strict prohibitions on food consumption. The results obtained from the research may contribute to the domestic and foreign businesses in Turkey, which commercialize products for Muslim Turkish migrants in Germany, and Turkish and German entrepreneurs who operate in Germany.

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