The Establishment of Halal-Thayyibah Behavior Among Muslim Consumers Following the COVID-19 Pandemic

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ABSTRACT

In general, this research aimed to fill the gaps left by previous studies that ignored the transformation of consumption behavior among Muslim consumers post-Covid-19 pandemic. While specifically aiming to map how the Muslim consumers with halalan thayyibah established themselves post-COVID-19 pandemic and also analyzing the factors that led to their establishment, To achieve these goals, this research applied a quantitative approach to collect data with a closed questionnaire technique that was constructed through variables adopted from the theory of planned behavior with the support of a randomly selected sample of 310 respondents. The unit of analysis was the muslim consumers residing in Bone Regency, South Sulawesi. Before being presented, the data was analyzed through three tests: the EFA, CFA, and SEM tests. The output showed that the muslim consumers rejected the theory of planned behavior and had to modify the model proposed for re-testing, and its output showed that their own attitude only established their behavior with halalan thayyibah. However, there was also a potential for their perceived behavioral control to establish itself.

Keywords: Covid-19, behavior, halalan thayyibah, muslim consumers

INTRODUCTION

The implementation of health protocols by the government during Covid-19 pandemic has led to a series of changes in people's consumption behavior, and this led to the establishment of the behavior of muslims with halalan thayyibah (Saputri & Huda, 2020, Wiyono & Wardhana, 2021), i.e. they behaved religiously and hygienically in buying food to consume in order to keep their body immune post the Covid-19 pandemic. Zainol et al. (2019) said that when referring to the principles of halalan thayyibah, every muslim is obliged not only to consume some halal food but also to eat

some safe, clean, nutritious and quality food. Before Covid-19 pandemic, indeed most of muslim consumers only paid attention to the prices, but not to the halal and nutritional content when they wanted to buy some food to consume (BPS Kabupaten Bone, 2021). However, during and post Covid-19 pandemic, based on the author's observations, they did not only pay attention to the prices, but also paid attention to its halalness through the halal label and its nutritional content through the nutrition label when they wanted to buy some. This means that the implementation of the health protocols by the government has led to a transformation in the behavior of muslim consumers, namely the establishment of the behavior of muslim consumers with halalan thayyibah when they wanted to buy some to consume post Covid-19 pandemic. Therefore the establishment of their behavior needs to map in order to indentify the factors that caused it.

So far, there were only three previous research found on mapping the establishment of behavior of muslim consumers with a theory and similar to ours, they are the research conducted by Elseidi (2017), Vanany, et al (2019), and Iranmanesh et al (2020). These three previous researches applied the theory of Planned Behavior in mapping the behavior of muslim consumers and were published by Emerald in the International Journal of Islamic Marketing. Elseidi (2017) in his research mapped the establishment of intention to buy halal-labeled food. According to him, this purchase intention was established by attitude, subjective norm and perceived behavioral control, and was controlled by belief in the halal label and Islamic teachings. He found that the theory of Planned Behavior was a valid model to map the establishment of the intention of Arab muslim consumers towards the halal-labeled food products in the mainstream supermarkets in the UK.

While Vanany, et al. (2019) in their research mapped the establishment of the behavior of muslim consumers in consuming some halal food. According to them, consumer behavior was established by intention and this intention was established by attitude, subjective norm and perceived behavioral control. They also found that the theory of Planned Behavior was a good model to apply in mapping the establishment of behavior of muslim consumers in Surabaya. It was different from the research conducted by Iranmanesh, et al., (2020). They mapped the willingness of muslim

consumers to buy halal-certified food through the extension of the theory of Planned Behavior. They found that the understanding of the theory of Planned Behavior could actually be extend to the context of halal food as well as in mapping the establishment of the factors that determined the willingness of muslim consumers in Malaysia to buy the halal-certified food.

It seems that there was not one of the three researches above which mapped the establishment of behavior of muslim consumers post Covid-19 pandemic. They only mapped it before Covid-19 pandemic. In addition, the application of theory of Planned Behavior in mapping it, was different from one another. Elseidi (2017) did not apply the variable of behavior, while the variable of intention was controlled by the variable of belief on the halal label and Islamic teachings. While Vanany, et al. (2019) only applied the variable of intention that had a direct effect towards the variable of behavior and other variables did not, and Iranmanesh, et al., (2020) modified the theory of Planned Behavior by adding another variables in determining the establishment of the behavior of muslim consumers. As for our research, it mapped it post Covid-19 pandemic by applying the theory of Planned Behavior (Ajzen, 1991). In addition, we apply it in two models, namely: First, it only made a direct and indirect effect for the variables of intention and perceived behavioral control towards the behavior of muslim consumers, and second, it also made a direct and indirect effect for the variables of attitude, subjective norm, and perceived behavior control towards muslim consumer behavior. This is the first one that has mapped the establishment of the behavior of muslim consumers post Covid-19 pandemic by applying the theory of Planned Behavior through two models and none of researchers did it before.

In general, this research aimed to complete the lack of previous studies which ignored the transformation process of consumption behavior that was happening to the muslim consumers post Covid-19 pandemic. While specifically, it aimed to map how the behavior of muslim consumers post Covid-19 pandemic with halalan thayyibah was established, and also analyzed the factors that led to its establishment. To respond to these goals, in order to understand the essence of the transformation of the behavior of muslim consumers post Covid-19 pandemic, the author applied the theory of Planned Behavior in mapping the establishment of the behavior of muslim consumers with halalan thayyibah post Covid-19 pandemic. Meanwhile, in analyzing the factors that cause its establishment, the author applied the EFA test supported by the SPSS application, and the CFA and SEM tests supported by the Lisrel application.

Ajzen (1985, 1991, 1992) in the theory of Planned Behavior explained that the human action was established by three kinds of factors, they are (1) belief in the behavioral outcome and its evaluation. It is called as a behavior belief, (2) belief in the normative expectation from the others, namely motivation to comply with this expectation. It is called as a normative belief, and (3) belief in the presence of factors that facilitate or hinder behavior, as well as the perception of the existence of power on these factors. It is called as a control belief. Based on this perspective, the behavioral belief leads to the favorable or unfavorable attitude towards the certain behavior, namely the normative belief, resulted in the establishment of the perception of social pressure to take an action or the subjective norm and control belief resulted in the perceived behavior control. The combination of attitude towards the behavior, subjective norm, and perceived behavior control resulted in the establishment of behavioral intention. Based on this explanation, it is possible to propose a hypothesis in this research that the intention of muslim consumers with halal thayyibah established their own behavior to behave it post Covid-19 pandemic, and this intention was effected by three main factors, they are attitude towards the halalan thayyibah behavior, subjective norm and perceived behavioral control.

RESEARCH METHODOLOGY

This research appled a quantitative approach to collect data with a closed questionnaire technique which was constructed based on the indicators of each observed variable. All variables observed in the proposed model, which were included in the questionnaire, were adopted from the theory of Planned Behavior (Ajzen, 1991) as stated above. These variables are: (1) Behavior of halal thayyibah as an endogenous variable, (2) Intention to behave with halalan thayyibah as an intervening variable, (3) Attitude towards the behavior of halalan tayyiban, subjective norm, and perceived behavioral control as exogenous variables. All of these variables adopted a five-item measurement scale (indicators)

Table 1.

The construct of instrument

Variables	Indicators	Codes
Behavior of halalan	Consumption due to observation	Y2.1
thayyibah (Y2)	Consumption due to knowledge	Y2.2
	Consumption due to experience	Y2.3
	Consumption due to information	Y2.4
	Donating halal and tayyib food	Y2.5
Intention to behave	Want to consume because of the advice	Y1.1
with halalan thayyibah (Y1)	Want to consume because it's good	Y1.2
	Want to consume because of necessity	Y1.3
	Want to consume because of the benefits	Y1.4
	Want to donate halal and tayyib food	Y1.5
Attitude towards	Information about the benefits of consumption	X1.1
the behavior of halalan tayyiban	Knowledge of the benefits of consumption	X1.2
(X1)	Feelings about the benefits of consumption	X1.3
	Tendency towards consumption benefits	X1.4
	Experience about the benefits of consumption	X1.5
Subjective norm	Government recommendation	X2.1
(X2)	Advice of religious and health experts	X2.2
	Recommendations for family and relatives	X2.3
	Friend's suggestion	X2.4
	Community advice	X2.5

Perceived	Available in traditional markets	X3.1
behavioral control (X3)	Available in shops	X3.2
	Available at grocery stores	X3.3
	Available in convenience stores	X3.4
	Available in restaurants and or cafes	X3.5

The indicators for each variable that were constructed into this research instrument were presented in Table 1. All indicators of the behavior of halalan thayyibah, intention to behave with halalan thayyibah, attitude towards the behavior of halalan thayyibah, subjective norm, and perceived behavioral control applied a Likert scale with five points (5 = strongly agree and 1 = strongly disagree), and the structural model proposed could be stated as follows:

 $\eta_{Y2}=\beta_{Y2}\eta_{Y2}+\gamma_1\xi_{Y1}+\gamma_2\xi_{X3}+\zeta$

 $\eta_{\mathrm{Y1}} = \beta_{\mathrm{Y1}}\eta_{\mathrm{Y1}} + \gamma_3\xi_{\mathrm{X1}} + \gamma_4\xi_{\mathrm{X2}} + \gamma_5\xi_{\mathrm{X3}} + \zeta$

 $\eta_{Y2} = \beta_{Y2}\eta_{Y2} + \gamma_{6}\xi_{Y1} + \gamma_{7}\xi_{X1} + \gamma_{8}\xi_{X2} + \gamma_{9}\xi_{X3} + \zeta$

The description of these equations are: η_{Y2} = behavior of halalan thayyibah, η_{Y1} = intention to behave with halalan thayyibah (endogenous variable), $\beta_{Y2} \eta_{Y2}$ = coefficient matrix for behavior of halalan thayyibah, $\beta_{Y1}\eta_{Y1}$ = coefficient matrix for intention to behave with halalan thayyibah, ξ_{Y1} = intention to behave with halalan thayyibah (exogenous variable), ξ_{X1} = attitude, ξ_{X2} = subjective norm, ξ_{X3} = perceived behavioral control, $\gamma_{1.9}$ = coefficient matrix 1 to 9 for exogenous variables.

The unit of analysis of this research was the Muslim community living in the region, namely in Bone Regency,¹ South Sulawesi and they were given an opportunity to be sampled and selected at random by distributing online questionnaires in Google Form format to them through social media, WhatsApp (the random sampling method). The complete answers from them who were successfully recorded on Google Forms

¹ Bone Regency is one of the autonomous regions in the province of South Sulawesi, Indonesia. The district capital is located in the city of Watampone. Based on data from Bone Regency in Figures for 2021 published by the Central Bureau of Statistics of Bone Regency, the population of Bone Regency in 2020 is 801,775 people, consisting of 391,682 men and 410,093 women. With an area of about 4,559.00 km2 of Bone Regency, the average population density of Bone Regency is 162 people/km².

were made as many as 310 records. This means that the sample obtained from the muslim consumers in Bone Regency, was 310 respondents. Hair et. al. (2014) suggested that the minimum sample requirement to apply a multivariate analysis is ten times the number of research instruments, and our research has met this requirement.

The data that had been collected was classified into two parts, they are the data for the identities of respondents, and the data for their answers. Their identities from the online questionnaire distributed to them, was described in a table form as presented in Table 2, while their answers were first analyzed before being presented, through three tests, they are: (1) Exploratory Factor Analysis (EFA), this test applied the IBM SPSS application Statistics 25 to state the significant correlation between the indicators and their variables applied through the value of Bartlett's Test of Sphericity (≤ 0.05) and the certainty of a sufficient sample support through the KMO value (KMO \geq 0.5), (2) Confirmatory Factor Analysis (CFA), this test applied the Lisrer 8.70 application to state that the model proposed was fit to apply to test the hypothesis through the Chi Square value (\leq value [df; Sig 5%]), Probability (\geq 0.05), CMIN/DF (\leq 2.00), RMSEA (≥ 0.05) , and GFI (≥ 0.90) indices, and also to state that the indicators applied were valid (≥ 0.05) and reliable (≥ 0.05), and (3) Structural Equation Modeling (SEM), this test also applied the Lisrer 8.70 application with the estimation method of Maximum Likelihood (ML) to state the R-Square value and the significance of the direct (≤ 1.96) and indirect (≤ 1.96) effect of the exogenous variables towards the endogenous variables to answer the hypothesis proposed in this research.

RESULTS AND DISCUSSION

Characteristics of Respondents

The characteristics of respondents as presented in Table 2, showed that there were more female respondents (65.48%) than male ones (34.5%). The majority of the respondents (96.77%) were between 19 to 49 years old. The respondents have achieved the following educational levels: High school 15.16%, Diploma 0.97%, Bachelor 59.68%, Master 20.65% and Doctoral 3.55%, and they worked as lecturers 10.32%, teachers 4.19%, goverment employees 6.45%, private employees 4.19 %, entrepreneurs

5.4%, higher education students (graduate and under graduate students) 47.10%, and others 22.26%.

Table 2.

Demography of respondents

Criteria/Category	Frequency	Percent (%)
Gender	riequency	Fercent (70)
Male	107	34.52 %
Female	203	65.48 %
Age	205	05.40 /0
<20	55	17.74 %
20-29	158	50.97 %
30-39	50	16.13 %
40-49	37	11.94 %
≤50	10	3.23 %
Level of education		0.20 //
High school	47	15.16 %
Diploma	3	0.97 %
Bachelor	185	59.68 %
Master	64	20.65 %
Doktoral	11	3.55 %
Occupation		
Lecturer	32	10.32 %
Teacher	13	4.19 %
Goverment employee	20	6.45 %
Private employee	13	4.19 %
Entrepreneur	17	5.48 %
Higher education student	146	47.10 %
Others	69	22.26 %

Source: Primary data (questionnaire) processed, 2021

EFA Test

The output of EFA test for five variables with 25 indicators by applying the aplication of IBM SPSS Statistics 25 were presented in Table 3. The EFA test was applied to state the correlation between the variables proposed in the model and their indicators through the values of KMO (Kaiser-Meyer-Olkin) and the values of Bartlett's Test of Sphericity. The values of KMO (Kaiser-Meyer-Olkin) show a sufficient or an insufficient sample for the model, while the values of Bartlett's Test of Sphericity show the continuation of factor analysis to apply. Table 3 showed that all variables had > 0.8 (≥ 0.5) of KMO values, and 0.000 (≤ 0.05) of Bartlett's Test of Sphericity values. It means that the model had a sufficient sample and the factor analysis could be continued to use.

Table 3.

	t of Kivio and Dartic	te s rest of Spherr	city tests
Variables	KMO (≥ 0,5)	Sig. (≤ 0,05)	Description
Y2	0.832	0.000	Significant
Y1	0.882	0.000	Significant
X1	0.885	0.000	Significant

0.000

0.000

Significant

Significant

Output of KMO and Bartlett's Test of Sphericity tests

Source: Primary data (questionnaire) processed, 2021

0.838

0.839

CFA Test

The Goodness of Fit test

X2

Х3

The output of goodness of fit test for 25 indicators by applying the aplication of Lisrel 8.70 was presented in Table 4. It showed that the value of Chi-Square obtained was 1120.85, Probability was 0.000, and these were not fit. According to Widarjono (2010), the model of confirmatory factor analysis (CFA) will be fit when its P-value is greater than 0.05, therefore it is necessary to modify the model proposed in this research. The modification of model will be taken when the output of goodness of fit test is not fit (Widarjono, 2010). In this recearch, it took the correlation among the residuals for

modification by looking at the values of the modification indices, namley from the column per change which had the largest values, which was applied to reduce the value of Chi-Square. However the modification indices by covariating among residuals should be carried out on a theoretical or logical basis. The ouput of the modification done was presented in table 5, and it showed that the value of Chi-Square (CMIN) was 28.98, Probability was 0.282 or greater than 0.05. A model will be fit when it has ≥ 0.05 for its Chi-Square P (Hulland, Chow, & Lam, 1996). Based on this, it colud be stated that the model proposed has been fit. The Goodness of fit test of the model could also be seen from the CMIN/DF, GFI, and RMSEA indices. Table 5 showed that the value of CMIN/DF obtained was 1.51, while the standard value expected for CMIN/DF is ≤ 2.0 (Waluyo, 2016), so based on this standard, the value has met the standard expected. Tabel 5 also showed the value of GFI obtained, it was 0.98 and stated fit when it has \geq 0.90 for its value. Meanwhile, the RMSEA index is a measure to apply for improving the tendency of Chi-Square statistics to reject the models with large samples, and the value of RMSEA obtained as presented in tabel 5, was 0.021 and stated fit when it has \leq 0.05 for its value.

Table 4.

Indeks	Cut off Value	Output	Description
Chi Square	≤ 303,969 (df=265; Sig 5%)	1120.85	Marginal
Probability	≥ 0.05	0.000	Marginal
CMIN/DF	≤ 2.00	1.15	Good
RMSEA	≤ 0.05	0.109	Marginal
GFI	≥ 0.90	0.76	Marginal

Output of goodness of fit test 1

Source: Primary data (questionnaire) processed, 2021

Table 5.

Output of goodness of fit test 2

Indeks	Cut off Value	Output	Description
Chi Square	≤ 303,969 (df=265; Sig 5%)	28.98	Good

≥ 0.05	0.282	Good
≤ 2.00	1.51	Good
≤ 0.05	0.021	Good
≥ 0.90	0.98	Good
	≤ 2.00 ≤ 0.05	≤ 2.00 1.51 ≤ 0.05 0.021

Source: Primary data (questionnaire) processed, 2021

The validity and reliability tests of indicators

When an indicator has a loading factor with a standardized loading estimate \geq 0.50, it can be stated that the indicator is valid (Ghozali, 2017), while according to Joreskog and Sorbom (2008) that the value of R-Square for each measurement equation represents the reliability of indicator. The values of loading factors obtained for 25 indicators by applying the aplication of Lisrel 8.70 as presented in table 6, were > 0.05. It means that all indicators could be stated valid. Meanwhile, the values of R-Square for 25 indicators as presented in Table 6 were also > 0.05. It means that all indicators could be stated valid. Meanwhile, the values of R-Square for 0.05 indicators as presented in Table 6 were also > 0.05. It means that all indicators could be stated reliable. However, the ouput of the goodness of tit test that have been carried out on 25 indicators as presented in table 4 showed that the model proposed was not fit. Therefore, it is necessary to re-test the model and the output was only 10 indicators selected. The values of loading factors and R-Square for these 10 indicators as presented in Table 7 were > 0.05 and could be stated valid and reliable, as well the factor analysis could be continued to apply.

Because the goodness of fit test has been met, namely the values of loading factors were > 0.5 and the values of reliability were quite good for each indicator, the model proposed was generally fit to apply in mapping the establishment of the behavior of muslim consumers with halalan thayyibah.

Table 6.

Loading factors dan R-Square before modification

Variables	Indicators	Loading Factors (λ)	R-Square
Behavior of halalan	Y21	0.70	0.74
thayyibah (Y2)	Y22	0.74	0.79
tilayyidali (12)	Y23	0.79	0.78

	Y24	0.70	0.68
Intention to behave	Y25	0.55	0.27
	Y11	0.75	0.67
with halalan thayyibah	Y12	0.78	0.79
(Y1)	Y13	0.75	0.82
	Y14	0.67	0.73
	Y15	0.67	0.51
Attitude towards the	X11	0.72	0.74
behavior of halalan	X12	0.72	0.79
tayyibah (X1)	X13	0.71	0.75
	X14	0.70	0.73
	X15	0.73	0.75
Subjective norm (X2)	X21	0.89	0.60
	X22	0.68	0.41
	X23	0.98	0.74
	X24	1.19	0.86
	X25	1.18	0.90
Perceived behavioral	X31	0.66	0.56
control (X3)	X32	0.84	0.66
	X33	0.81	0.74
	X34	0.72	0.63
	X35	0.74	0.51

Source: Primary data (questionnaire) processed, 2021

Table 7.

Loading factors dan R-square after modification

Variables	Indicators	Loading Factors (λ)	R-Square
Behavior of halalan thayyibah	Y21	0.88	0.77
(Y2)	Y24	0.84	0.70
Intention to behave with	Y12	0.90	0.81
halalan thayyibah (Y1)	Y13	0.94	0.89
Attitude towards the	X12	0.86	0.73
behavior of halalan tayyibah	X15	0.87	0.76
(X1)			
Subjective norm (X2)	X24	0.90	0.81
	X25	1.01	1.02
Perceived behavioral control	X31	0.76	0.58
(X3)	X34	0.77	0.60

Source: Primary data (questionnaire) processed, 2021

SEM Test

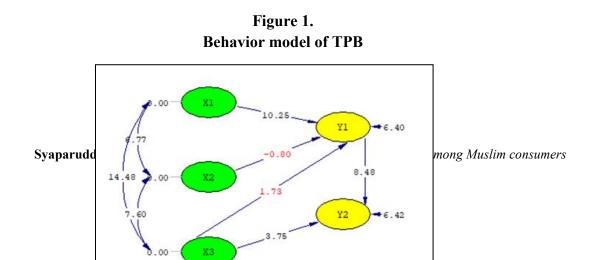
The Establishment of the behavior of halalan thayyibah

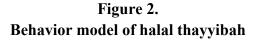
The output of establishment test of the behavior of halalan thayyibah by applying the TPB (Planned Behavior Theory) model as presented in Figure 1, showed that the P-value 0.00000 (≥ 0.05) and the value of RMSEA 0.90 (≤ 0.05) were not fit. It means that the TPB model could not be continued to map the establishment of behavior of muslim consumers with halalan thayyibah. Therefore, the structural equation had to re-propose in order to map the establishment of behavior of muslim consumers with a stated as below:

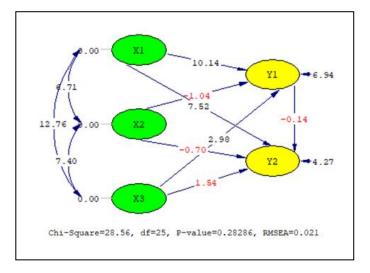
$$\begin{split} \eta_{Y2} &= \beta_{Y2} \eta_{Y2} + \gamma_1 \xi_{Y1} + \gamma_2 \xi_{X1} + \gamma_3 \xi_{X2} + \gamma_4 \xi_{X3} + \zeta \\ \eta_{Y1} &= \beta_{Y1} \eta_{Y1} + \gamma_5 \xi_{X1} + \gamma_6 \xi_{X2} + \gamma_7 \xi_{X3} + \zeta \\ \eta_{Y2} &= \beta_{Y2} \eta_{Y2} + \gamma_8 \xi_{Y1} + \gamma_9 \xi_{X1} + \gamma_{10} \xi_{X2} + \gamma_{11} \xi_{X3} + \zeta \end{split}$$

The description of these equations are: η_{Y2} = behavior of halalan thayyibah, η_{Y1} = intention to behave with halalan thayyibah (endogenous variable), $\beta_{Y2} \eta_{Y2}$ = coefficient matrix for behavior of halalan thayyibah, $\beta_{Y1}\eta_{Y1}$ = coefficient matrix for intention to behave with halalan thayyibah, ξ_{Y1} = intention to behave with halalan thayyibah (exogenous variable), ξ_{X1} = attitude, ξ_{X2} = subjective norm, ξ_{X3} = perceived behavioral control, $\gamma_{1.9}$ = coefficient matrix 1 to 11 for exogenous variables.

The output of re-test based on the structural equation above, as presented in Figure 2, showed that the P-value 0.28286 (≥ 0.05) and the value of RMSEA 0.021 (≤ 0.05) were fit. It means that this model would be apply to map the establishment of behavior of muslim consumers with halalan thayyibah.







R-Square value

The R-Square value obtained from the output of SEM test by applying the aplication of Lisrel 8.70 for the endogenous variable of intention to behave with halalan thayyibah was 0.72 (72%), which means that the variation of intention of muslim consumers with halalan thayyibah was established by the varibles of attitude, subjective norm and perceived behavioral control by 72%, while the remaining 28% was established by another variables that were not included in the model proposed. In other words, the magnitude of the effect of attitude, subjective norm and perceived behavioral control towards the intention to behave with halalan thayyibah was 0.72 (72%). While the R-Square obtained for the endogenous variable of behavior of halalan thayyibah was

0.81 (81%), which means that the variation of behavior of muslim consumers with halalan thayyibah was established by the variables of intention to behave with halalan thayyibah, attitude, subjective norm and perceived behavioral control was 81%, while the remaining 19% was established by another variables that were not included in the model proposed. In other words, the magnitude of the effect of intention to behave with halalan thayyibah, attitude, subjective norm and perceived behavioral control was 0.81 (81%), which means that 81% of intention to behave with halalan thayyibah, attitude, subjective norm and perceived behavioral control was 0.81 (81%), which means that 81% of intention to behave with halalan thayyibah, attitude, subjective norm and perceived behavioral control was able to establish the behavior of muslim consumers with halalan thayyibah, while the remaining 19% was established by another variables.

Output of hypothesis test

The output of hypothesis test as presented in Table 8, showed that the model proposed had seven direct effects, they were: (1) X1 had a significant effect towards Y1, (2) X2 had an insignificant effect towards Y1, (3) X3 had a significant effect towards Y1, (4) Y1 had an insignificant effect towards Y2, (5) X1 had an insignificant effect towards Y2, (6) X2 had an insignificant effect towards Y2, and (7) X3 had an insignificant effect towards Y2, and had three indirect effects, they were (1) X1 had an insignificant effect towards Y2, and had three indirect effects, they were (1) X1 had an insignificant effect towards Y2 through the mediation of Y1, (2) X2 had an insignificant effect towards Y2 through the mediation of Y1, 3 X3 had an insignificant effect towards Y2 through the mediation of Y1, and (3) X3 had an insignificant effect towards Y2 Y2 through the mediation of Y1.

Table 8.					
	Output of hypothesis test				
No	Causality Relationship	Cut off	T-Statistic	Description	
		Value			
А	Direct effect				
1	Attitude (X1) -> Intention to	\geq 1.96	10.14	Significant	
	behave with halalan thayyibah (Y1)				
2	Subjective norm (X2) -> Intention to	\geq 1.96	-1.04	Insignificant	
	behave with halalan thayyibah (Y1)				
3	Perceived behavioral control (X3) ->	≥1.96	2.98	Significant	
	Intention to behave with halalan				
	thayyibah (Y1)				

T L L O

В	Direct effect			
1	Intention (Y1) -> Behavior of halalan	\geq 1.96	-0.14	Insignificant
	thayyibah (Y2)			
2	Attitude (X1) -> Behavior of halalan	≥ 1.96	7.52	Significant
	thayyibah (Y2)			
3	Subjective norm (X2) -> Behavior of	\geq 1.96	-0.69	Insignificant
	halalan thayyibah (Y2)			
4	Perceived behavioral control (X3) ->	\geq 1.96	1.54	Insignificant
	Behavior of halalan thayyibah (Y2)			
С	Indirect effect			
1	Attitude (X1) -> Intention (Y1) ->	\geq 1.96	-0.14	Insignificant
	Behavior of halalan thayyibah (Y2)			
2	Subjective norm (X2) -> Intention	≥ 1.96	0.14	Insignificant
	(Y1) -> Behavior of halalan			
	thayyibah (Y2)			
3	Perceived behavioral control (X3) ->	\geq 1.96	-0.14	Insignificant
	Intention (Y1) -> Behavior of halalan			
	thayyibah (Y2)			

Source: Primary data (questionnaire) processed, 2021

The output of hypothesis test as presented in Table 8, could be explained as follows: First, the T-statistical value obtained from the direct relationship between the attitude (X1) and the intention to behave with halalan thayyibah (Y1) was 10.14 (> 1.96), which states that there was a significant effect between the attitude and the intention of muslim consumers with halalan thayyibah. The positive value on T-statistics showed that if the muslim consumers thought positively that the behavior of halalan thayyibah could keep their bodies immune post Covid-19 pandemic, they would have a strong intention to consume some halal and nutritious food, and vice versa. The significant effect and the positive value showed that muslim consumers thought that the behavior of halal thayyibah could keep their bodies immune, they would intend to consume some halal and nutritious food so that they could keep their bodies immune post Covid-19 pandemic. This means that the attitude of muslim consumers could establish their intention to behave a halal thayyibah post Covid-19 pandemic.

Second, the T-statistical value obtained from the direct relationship between the subjective norm (X2) and the intention to behave with halalan thayyibah (Y1) was -1.04

(<1.96), which states that there was an insignificant effect between the subjective norm and the intention of muslim consumers with halalan thayyibah. The negative value on T-statistics showed that the muslim consumers did not intend to consume some halal and nutritious food only because of information that said that consuming some halal and nutritious food could keep their bodies immune post Covid-19 pandemic. The insignificant effect and the negative value showed that the subjective norm did not establish the intention of muslim consumers to consume some halal and nutritious food because they did not trust the information circulating. Even if they intended to consume it to keep their bodies immune post Covid-19 pandemic, it was because of their own attitude.

Third, the T-statistical value obtained from the direct relationship between the perceived behavioral control (X3) and the intention to behave with halalan thayyibah (Y1) was 2.98 (> 1.96), which states that there was a significant effect between the perceived behavioral control and the intention of muslim consumers with halal thayyibah. The positive values on T-statistics showed that if they had an ability and an opportunity to consume food in order to keep their bodies immune post Covid -19 pandemic, would do so, and vice versa. The significant effect and the positive value showed that the muslim consumers had an ability and an opportunity so that they intended to consume some halal and nutritious food in order to keep their bodies immune post Covid -19 pandemic. This means that the perceived behavioral control could establish the intention of muslim consumers with halalan thayyibah post the Covid-19 pandemic.

Fourth, the T-statistic value obtained from the direct relationship between the intention (Y1) and the behavior of halalan thayyibah (Y2) was -0.14 (< 1.96), which states that there was an insignificant effect between the intention and the behavior of muslim consumers with halalan thayyibah. The negative value on T-statistics showed that if the muslim consumers intend to behave a halal thayyibah in keeping their bodies immune post Covid-19 pandemic, they would not consume some halal and nutritious food but they did it in another ways, and vice versa. The insignificant effect and the negative value showed that the intention of muslim consumers did not establish their behavior of halalan thayyibah. It means that they would do another ways to keep their

bodies immune post Covid -19 pandemic, but not by consuming some halal and nutritious food.

Fifth, the T-statistic value obtained from the direct relationship between the attitude (X1) and the behavior of halalan tayyibah (Y2) was 7.52 (> 1.96), which states that there was a significant effect between the attitude and the behavior of muslim consumers with halalan tayyibah. The positive value on T-statistics showed that if the muslim consumers thought positively that the behavior of halalan thayyibah could keep their bodies immune during the Covid-19 pandemic by consuming some halal and nutritious food, they would do it, and vice versa. The significant effect and the positive value showed that the behavior of muslim consumers with halalan thayyibah by consuming some halal and nutritious food could keep their bodies immune post Covid-19 pandemic. It menas that the attitude of muslim consumers could establish their behavior of halalan thayyibah post Covid-19 pandemic.

Sixth, the T-statistic value obtained from the direct relationship between the subjective norm (X2) and the behavior of halalan thayyibah (Y2) was -0.69 (<1.96), which states that there was an insignificant effect between the subjective norms and the behavior of muslim consumers with halalan thayyibah. The negative value on T-statistics showed that the muslim consumers would not consume some halal and nutritious food just because of information that said that consuming some halal and nutritious food could keep their bodies immune post Covid-19 pandemic. The insignificant effect and the negative value showed that the subjective norm did not establish the behavior of muslim consumers with halalan thayyibah by consuming some halal and nutritious food because they did not believe in the information circulating. Even if they consumed it to keep their bodies immune post Covid-19 pandemic, it was because of their own attitude.

Seventh, the T-statistic value obtained from the direct relationship between the perceived behavioral control (X3) and the behavior of halalan thayyibah (Y2) was 1.54 (< 1.96), which states that there was an insignificant effect between the perceived behavioral control and the behavior of muslim consumers with halalan thayyibah. The positive value on T-statistics showed that if the muslim consumers had an ability and an opportunity to behave with halalan tayyiban in keeping their bodies immune post

Covid-19 pandemic, they would definitely consumed some halal and nutritious food, and vice versa. The insignificant effect and the positive value showed that the perceived behavioral control had a potential to establish the behavior of muslim consumers with halalan thayyibah post Covid-19 pandemic.

Eighth, the T-statistic value obtained from the indirect relationship between the attitude (X1) and the behavior of halalan thayyibah (Y2) through the mediation of intention (Y1) was -0.14 (< 1.96), which states that there was an insignificant indirect effect between the attitude and the behavior of muslim consumers with halalan thayyibah through the mediation of intention. The negative value on T-statistics showed that if the muslim consumers in Bone Regency intended to behave with halalan thayyibah in keeping their bodies immune post Covid-19 pandemic, the impact towards the behavior of halalan thayyibah was not by consuming some halal and nutritious food but in more appropriate ways for them. The insignificant indirect effect and the negative value on T-statistics showed that the intention did not mediate the attitude in establishing the behavior of muslim consumers with halalan thayyibah, but rather the attitude directly established their behavior of halalan thayyibah.

Ninth, the T-statistical value obtained from the indirect relationship between the subjective norm (X2) and the behavior of halalan thayyibah (Y2) through the mediation of intention (Y1) was 0.14 (< 1.96), which states that there was an insignificant indirect effect between the subjective norm and the behavior of muslim consumers with halalan thayyibah through the mediation of intention. The positive value on T-statistics showed that if the muslim consumers intended to consume some halal and nutritious food because of information that said that the halal and nutritious food could keep their bodies immune post Covid-19 pandemic, this could have an impact towards their behavior of halal thayyibah. The insignificant indirect effect and the positive value showed that the intention could not mediate the subjective norm in establishing the behavior of muslim consumers. This means that there is no possibility that the information about the immunity of their bodies could be kept by consuming some halal and nutritious food in order to keep their intention so that they did not behave a halal thayyibah by consuming some halal and nutritious food in order to keep their bodies immune post Covid -19 pandemic.

Tenth, the T-statistical value obtained from the indirect relationship between the perceived behavioral control (X3) and the behavior of halalan thayyibah (Y2) through the mediation of intention (Y1) was -0.14 (< 1.96), which states that there was an insignificant indirect effect between the perceived behavioral control and the behavior of muslim consumers with halalan thayyibah through the mediation of intention. The negative value on T-statistics showed that if the muslim consumers intended to behave with halalan tayyiban in keeping their bodies immune post Covid-19 pandemic because they had an ability and an opportunity to do this, that would not have an impact towards their behavior of halalan tayyibah by consuming some halal and nutritious food post Covid-19 pandemic. The insignificant indirect effect and the negative value on T-statistics showed that the intention did not mediate the perceived behavioral control in establishing the behavior of muslim consumers with halalan tayyibah by consuming some halal and nutritious food post Covid-19 pandemic towards the intention did not mediate the perceived behavioral control in establishing the behavior of muslim consumers with halalan thayyibah by consuming some halal and nutritious food post Covid-19 pandemic, even though they had an ability and an opportunity to do that.

It seems that the muslim consumers rejected the theory of Planned Behavior. It means that this theory could not map the establishment of the behavior of muslim consumers with halal thayyibah in keeping their bodies immune by consuming some halal and nutritious food post Covid-19 pandemic. However, in order to map the establishment of the that behavior, the theory of Planned Behavior should be modified. This showed that the muslim consumers had a distinctive behavioral characteristics and it is possible that their behavior was established through the acculturation between the culture and the Islamic values and it is called as a local wisdom that has been being passed down from one generation to the next generation. On this basis, the theory of Planned Behavior needed to modify in order map the establishment of the behavior of muslim consumers with halalan thayyibah in keeping their bodies immune by consuming some halal and nutritious food post Covid-19 pandemic. Their behavior model of halalan thayyibah as presented in Figure 3 showed that their own attitude established their behavior but there was a potential of the perceived behavioral control to establish their behavior of halalan thayyibah. While their intention to behave with halalan thayyibah was established by the attitude and the perceived behavioral control, but this intention did not establish their behavior. It means that in the model proposed,

they were so pragmatic and emotional to take an action in keeping their bodies immune post Covid-19 pandemic.

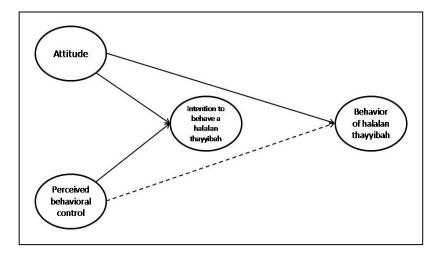


Figure 3. The model of muslim's halal thayyibah behavior

CONCLUSION

It turns out that the behavior of Muslim consumers in Indonesia, especially those who live in the region had an own cultural characteristics that establish their behavior of halalan thayyibah in keeping their bodies immune post Covid-19 pandemic and their cultural characteristics have been acculturated with the Islamic values passed down from one generation to the next generation and this is usually called as a local wisdom. Therefore, the theory of Planned Behavior needs to modify if it is to be applied to map the establishment of the behavior of muslim consumers with halalan thayyibah and their local wisdom also needs to adopt as one of variables. In fact, the behavior of muslim consumers with halalan thayyibah in the model proposed, was only established by their own attitude, but there was also a potential of the perceived behavioral control to establish that behavior.

The model proposed to map the behavior of halalan thayyibah with an analysis unit of Muslim consumer domiciling in the region, namely in Bone Regency, South Sulawesi to behave was not able to do the job. This could be due to not adopting their local wisdom which was a characteristic of their behavior. In addition, the theory of Planned Behavior which was applied to map the establishment of their behavior of halalan thayyibah, was also unable to accommodate it. It means that it needs another theories to support it. Another thing, it could be that the research method applied, namely the quantitative research method, also turned out to be unable to explain more deeply about the establishment of the behavior of muslim consumers with halalan thayyibah, and could only be disclosed to the extent of testing the model proposed. Therefore, the authors wait and expect a help from the other and the next researchers to continue this research, so that its output could be more perfect.

REFERENCE

- Afdholy, N. (2019). "Perilaku konsumsi masyarakat urban pada produk kopi ala starbucks [Consumption behavior of urban society towards Starbucks-style coffee products]," *Satwika: Kajian Ilmu Budaya dan Perubahan Sosial*, 3(1), 43-53. DOI: https://doi.org/10.22219/satwika.v3i1.8681.
- Ajzen, I. (1985). "From intentions to actions: A theory of planned behavior, action control," 11–39. DOI:10.1007/978-3-642-69746-3 2.
- Ajzen, I. (1991). "The theory of planned behavior. Organizational behavior and human decision processes," 50 (2), 179–211. DOI:10.1016/0749-5978(91) 90020-t.
- Ajzen, I., & Driver, B. L. (1992). "Application of the theory of planned behavior to leisure choice," *Journal of leisure research*.
- BPS Kabupaten Bone (2021). "Kabupaten Bone dalam angka 2020 [Bone Regency in Figures for 2020]", Retrieved from https://bonekab.bps.go.id/ publication/2020/02/26/71712cf4d6be46e3a4bd1b51/kabupaten-bone-dalamangka-2020.html, August 22, 2021 at 17:36 WITA.
- Dzikraya, F. (2020). "Perilaku konsumen muslim terhadap konsumsi food and beverage pada masa pandemi Covid-19 [Muslim consumer behavior towards food and

beverage consumption during the Covid-19 pandemic]," *Al-Muamalat: Jurnal Ekonomi Syariah*, Vol 7, No 1. DOI: https://doi.org/ 10.15575/am.v7i1.10857

- Elseidi, R. I. (2018). "Determinants of halal purchasing intentions: evidences from UK," *Journal of Islamic Marketing*, 9(1), 167–190. DOI:10.1108/jima-02-2016-0013.
- Ghozali I., & Fuad. (2012). Structural equation modeling, teori, konsep dan aplikasi dengan program LISREL 8.8 [Structural equation modeling, theory, concept and application with LISREL 8.8 . program], Semarang: Universitas Diponegoro.
- Ghozali, I. (2017). Model persamaan struktural konsep dan aplikasi dengan Program AMOS 24 [Structural equation model concept and application with AMOS 24 Program] (update Bayesian SEM). Semarang: Badan Penerbit Universitas Diponegoro.
- Hair, J. F. et. al. (2014). A Primer on partial least squares structural equation modeling (PLS-SEM), Los Angeles: Sage.
- Hulland, J., Chow, Y.H., & Lam, S.Y. (1996). "Use of causal models in marketing research: A review," *International Journal of Research in Marketing*, 13, 181-197.
- Iranmanesh, M., Mirzaei, M., Parvin Hosseini, S. M., dan Zailani, S. (2019). "Muslims' willingness to pay for certified halal food: an extension of the theory of planned behaviour." *Journal of Islamic Marketing*, 11(1), 14–30. DOI:10.1108/jima-03-2018-0049.
- Joreskog, K. & Sorbom, D. (2008). *Lisrel 7:Aguide to the program and applications*, 2nd edition. Chicago:, Inc.
- Leni, I. M., & Zunaidi, A. (2022). Indonesia's Islamic Banking Strategy For Sustaining Financial Operations During The Pandemic. Proceedings of Islamic Economics, Business, and Philanthropy, 1(1), 40–49. Retrieved from https://jurnalfebi.iainkediri.ac.id/index.php/proceedings/article/view/214
- Rahman, A., Fitrah M. (2018). "Perilaku konsumsi masyarakat dalam perspektif islam di Kelurahan Barombong Kota Makassar [Community consumption behavior in an Islamic perspective in Barombong Village, Makassar City]," *Laa Maisyir: Jurnal Ekonomi Islam*, Vol. 5 No. 1. DOI: https://doi.org/10. 24252/amaisyir.v5i1. 4944.

- Rembulan, N. D., & Firmansyah, E. (2020). "Perilaku konsumen muslim generasi-z dalam pengadopsian dompet digital [Z-generation Muslim consumer behavior in digital wallet adoption]," VALID Jurnal Ilmiah, 17(2), 111-128. Retrieved from http://journal.stieamm.ac.id/index.php/valid/article/ view/144
- Saputri, O. B., dan Huda N. (2020). "Pengaruh Informasi Covid-19 melalui Media Sosial terhadap Perilaku Konsumen [The Effect of Covid-19 Information through Social Media towards Consumer Behavior]," HUMAN FALAH: Jurnal Ekonomi dan Bisnis Islam, Vol. 7 No. 2.
- Soesilowati, S. E, and Indah, Y. C. (2016). "Komparasi perilaku konsumen produk halal di area mayoritas dan minoritas muslim [Comparison of consumer behavior of halal products in Muslim majority and minority areas]," *Jurnal Ekonomi dan Pembangunan*m, 21 (2), 167-78. DOI: https://doi.org/10.14203/JEP.21 .2.2013.49-60.
- Sutrisno, R. (2013). "Perilaku konsumen muslim: persepsi religiusitas dan persepsi atribut produk terhadap loyalitas produk makanan dan minuman berlabel halal di kalangan mahasiswa muslim di Bandung," Jurusan Administrasi Niaga Politeknik Negeri Bandung, Vol 5 No 2. DOI: https://doi. org/ 10.35313/ sigmamu.v5i2.854
- Syaputra, E. (2017). "Perilaku konsumsi masyarakat modern perspektif islam: telaah pemikiran imam Al-Ghazali dalam Ihya' Ulumuddin [Consumption behavior of modern society from an Islamic perspective: an analysis of the thoughts of Imam Al-Ghazali in Ihya 'Ulumuddin]," *Falah: Jurnal Ekonomi Syariah*, 2(2), 144-145. DOI: https://doi.org/10.22219/jes.v2i2.5102
- Vanany, I., Soon, J. M., Maryani, A., & Wibawa, B. M. (2019). "Determinants of halalfood consumption in Indonesia," *Journal of Islamic Marketing*. DOI:10.1108/jima-09-2018-0177.
- Waluyo, M. (2016). Mudah cepat tepat penggunaan tools Amos dalam aplikasi [Easy, fast, precise use of Amos tools in applications] (SEM). Surabaya: UPN Veteran Jawa Timur.
- Wibowo, D. E., dan Madusari, B. D. (2018). "Pengaruh labelisasi halal terhadap keputusan pembelian oleh konsumen muslim terhadap produk makanan di Kota Pekalongan [The effect of halal labeling towards purchasing decisions by Muslim

consumers on food products in Pekalongan town]," *Indonesia Journal of Halal*, vol. 1, no. 1, pp. 73-80. DOI: https://doi.org/10.14710/ halal.v1i1.3400

- Widarjono, A. (2010). Analisis statistika multivariat terapan [An analysis of applied multivariate statistical]. Yogyakarta: UPP STIM YKPN.
- Wiyono, W. dan Wardhana, I. (2021). "Analisis lokasi, keberagaman produk, harga dan perilaku konsumen dengan minat sebagai moderasi terhadap kepuasan konsumen muslim [Analysis of location, product diversity, price and consumer behavior with interest as a moderator of Muslim consumer satisfaction]," *Jesya (Jurnal Ekonomi dan Ekonomi Syariah)*, 4(2), 1096-1103. DOI: https://doi.org/https://doi.org/10.36778/ jesya.v4i2.387.
- Zainol, Z., Yahaya, R., & Osman, J. (2019). "Application of the tayyib concept among Malaysian muslim consumers: The role of nutrition label," *Journal of Islamic Marketing*, 11(3), 819–840. DOI: https://doi.org/10.1108/JIMA-03-2018-0048.