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## A Comparative Study on Behavioral Determinants of Fast-Food Consumption Behavior among Undergraduates in Kelantan, Malaysia

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### Abstract

This cross-sectional study was conducted to investigate the relationship between Theory of Planned Behavior dimensions comprised of attitude, behavioral intention, subjective norms and perceived behavioral control towards undergraduate students' fast food consumption behavior. By using quota sampling, a total of 357 students from Universiti Malaysia Kelantan (UMK) City Campus, represented by seven programs; were approached, and each of the programs was represented by 51 students. UMK City Campus was selected as the sole sampling frame for this study as it has the highest accessibility to fast food as compared to other tertiary educational institutions in Kelantan. Data was collected by using a set of self-administered questionnaire which was distributed online via google form. The results from correlational analysis discovered that there were significant strong positive relationships between each dimension of Theory of Planned Behavior (TPB) towards the students' fast food consumption behavior, either for Faculty of Entrepreneurship and Business (FKP) or Faculty of Hospitality, Tourism and Wellness (FHPK) of UMK. Other than that, regression analysis has shown contradicting findings on the influence of independent variables towards the dependent variable. For FKP, students' fast-food consumption behavior can be affected by their perceived behavioral control and behavioral intention while for FHPK; attitude, subjective norms and behavioral intention are the dimensions that can affect its students' consumption behavior. Furthermore, several recommendations have been pointed out for the respective undergraduate students as well as for future researchers.

**Keywords:** Fast-Food Consumption, Attitude, Behavioural Intention, Subjective Norms, Perceived Behavioural Control

## Introduction

The world especially in some of the Western Countries faced a chronic obesity prevalence whereby this health issue has been firmly contributed by the fast-food consumption of their citizens (Jiang et al., 2019). According to World Health Organization (WHO), overweight and obesity can be referred as the condition where individuals with accumulated excessive or abnormal fat which may be risky to the individual's health (World Health Organization (WHO), 2021). Commonly linked as one of the causes for overweight and obesity, fast food is often known as hamburgers, pizza, chicken, or other types of food that can be ready and served quickly at a cheap price (Song, 2016). With the current trends of the society, fast-food intake was not counted as a portion of meal to consume, rather it has become a modern lifestyle habit that is needed to be followed particularly by the students (Garza et al., 2016). In fact, according to the 2019 statistics, there was an increment in terms of the percentage of food and beverage service activities of 2.2 percent (Department of Statistics Malaysia, 2019), and this has shown that people are now preferring to order the food outside, rather spending their time to prepare and eat the home-cooked meals. This has especially been supported by Benajiba (2016), stated that there was clear evident that adults have high fast-food intake especially the university students. This eating habit is known to happen in any other countries as well in which it was reported, the university students in Eastern Province of Saudi Arabia was found to have high fast-food consumption (Tam et al., 2017). This is because the students are busy studying or revising making them to have less time to cook in their rented houses and indirectly making fast-food chain as a popular trend among teenagers (Nadzar & Hamid, 2019).

## Problem Statement

The Institute of Public Health Malaysia has been conducting an annual survey on the national health and according to its latest report of National Health and Morbidity Survey (NHMS), it was revealed that 50.1 percent of Malaysian adults were either overweight or obese, encompassing 30.4 percent of overweight and 19.7 percent of obese (Institute for Public Health Malaysia, 2020). A study which was conducted in Malaysia university, discovered that the Malaysia university students has the prevalence of 21.2% for overweight and 16.3% of obesity in their overall study samples (Wan Mohamed Radzi et al., 2019). These percentages should be worried by the nation as this health problem has been indicated as one of the top contributor for respiratory diseases, cardiovascular diseases and type 2 diabetes (Goto et al., 2018). As a matter of fact, obesity has been strongly related to fast-food consumption especially for the postgraduate students as been revealed by one study that being conducted in five Malaysia universities (Radzi et al., 2019).

The revolution of the importance of speedy services in food and beverage industries has put the fast-food restaurants in advantageous situation. Teenagers put a lot of interest in fast-food as they will visit the restaurants twice a week (Nadzar & Hamid, 2019). Besides, visiting fast-food restaurants is like habitual daily activity of most undergraduate students, resulting the growth of more fast-food outlets around the compound of university campuses (Bakare & Olumakaiye, 2016). Malaysia is not an exception in this issue as the mean body mass index (BMI) in Malaysia is 23.64kg, in which 9.5% of the respondents were obese and 22% were overweight (Fournier et al., 2016). As a matter of fact, 93% of 320 respondents from Universiti Sultan Zainal Abidin has enjoyed fast-food and considered it as their primary preference (Syafiqah et al., 2018). This signified that Malaysia showed the increasing trend of obesity and unhealthy food intake routine among its citizens, portraying how important

to understand their consumption behaviour to propose a better solution for the issue highlighted. There are two objectives for this research:

1. To investigate the relationships between dimensions of Theory of Planned Behaviour (attitude, behavioral intention, subjective norms and perceived behavioural control) and fast-food consumption behaviour among undergraduate students in UMK City Campus.
2. To determine the strongest predictor of fast-food consumption behaviour among the undergraduate students in UMK City Campus.

## Literature Review

### Fast Food Consumption Behaviour

Out-of-home food (takeaway and take-out of fast food) has become increasingly popular as it saves times for food preparation for the customers (Janssen et al., 2018). Fast food can be referred as food sold in a restaurant or store that provides fast customer service which is also presented in packaged form to carry home (Oexle et al., 2015). Fast-food consumption was commonly associated with poor eating habits such as drinking soft drinks and higher carbonated beverages while consuming low quantities of vegetables and has insufficient nutrient requirements (Ashdown-Franks et al., 2019). They further added that 46.1% of teens ate fast food at least once a week (Ashdown-Franks et al., 2019). As life of a student is too packed with activities such as lectures, tutorials and co-curricular activities as well as abundant of assignments that need to be done, the students will respectively prefer to eat on-the-go rather than to eat-clean, by choosing fast food because it is convenient and can save more time (De Piero et al., 2015).

Furthermore, students' attentiveness of their dietary intake is crucial as it affects not only physical but also the students' mental (Adam, 2016). The temptation of fast-food for being sold at a relatively low price does not change the fact that it still contains high levels of calories, saturated fat, trans-fat, sugar, simple carbohydrates, and sodium (Jia et al., 2021). World Health Organization (WHO) reported that there is a huge gap between the increasing trend of obesity as in 2016, 39% of adults were revealed to be obese, when the obesity rate in 1975 was just around 3% in men and 6% in women (Jia et al., 2021). With great concern that obesity is increasing among young adults (Institute for Public Health, 2015), this study is intended to spread awareness among university students in Malaysia to fully utilize the nutrition facts to decide and consume healthier food alternatives when they used to enjoy eating outside especially the fast-food.

### Theory of Planned Behaviour

Theory of Planned Behaviour (TPB) has been successfully used in order to predict and describe behaviours, ranging from physical activity to drug usage, choice of travel mode to recycling, consumer behaviour to safer sexual relationships and others (Ajzen, 2020). He also added that this theory starts with the definition of behaviours at hand, specifically explains the behaviour's target, the actions involved, its context and the time frame of when it happened. There are 4 important dimensions that are highlighted in Theory of Planned Behavior (TPB) which are behavioral intention, attitude, subjective norms and perceived behavioral control.

Behavioral intention is a motivating factor that can capture the effort of an individual in doing certain behaviors (Mamman et al., 2016). Three consecutive factors of this theory which are attitudes, subjective norms and perceived behavioural control can be determined through individual's behavioural intention (Ajzen, 2020). A previous study found that 95.4% of respondents ate at fast-food restaurant and 79.1% ate fast-food at least once a week (ALFaris

et al., 2015). Individual's engagement in a behaviour can be emphasized by his or her attitude towards the behaviour, supported by the subjective norms of people around them (Ajzen, 2020). Meanwhile, his or her behavioural intention can only be concretely formed when there is strong perceived behavioural control within the individual.

According to the TPB theorists, attitude is the likely of an individual to respond to a psychological object in the degree of favourableness or unfavourableness (Fishbein & Ajzen, 2010). In other words, attitude may be described as the negative or positive evaluation of consequences in performing a certain behaviour. In related to food domain, behavioural intention has been strongly associated to attitude (McDermott et al., 2015), reflecting that consumers' attitude can strongly influence them to have greater intention of purchasing and consuming fast-food. A past study proved how the consumers' purchasing behaviour is directly affected by their attitude (Akkaya et al., 2017). Besides, fast-food is also not an exception for the elder generation as findings have revealed that attitudes can greatly influence the fast-food consumption among elders and married respondents (Ghoochani et al., 2018). Hence, fast-food restaurants need to understand every customer's attitudes particularly the university students' attitude as understanding is an important part of restaurant's marketing strategy (Akhter, 2019). Similarly, another past study also found how the consumers' purchasing behaviour is directly affected by their attitude (Akkaya et al., 2017). Hence, fast-food restaurants need to understand every customer's attitudes particularly the university students' attitude as understanding is an important part of restaurant's marketing strategy (Akhter, 2019).

Next, subjective norms can be referred as the group of people's beliefs which is weighted by an individual's normative beliefs that conform to the group (Gholipour-Baboli et al., 2017). As a matter of fact, students' subjective norms can be influenced by their parents, teachers and especially friends who has the most influence for high-school students to consume fast food (Mirkarimi et al., 2016). This is due to the fact 52.2% of high-school students will meet their friends at fast-food outlets (Mirkarimi et al., 2016). This finding was supported by a previous study where it was discovered that subjective norms can positively affect an individual's intention of continued usage (Ozturk et al., 2016). In the case of fast-food consumption behaviour, subjective norms can influence the individual to consistently consume the fast-food because of the conformity to the group's beliefs.

Lastly, the element of perceived behavioural control can be defined as the individual's perception on the difficulties of performing a required behaviour (Gholipour-Baboli et al., 2017). A behaviour can be performed with the presence of sufficient resources and the respective individual's ability in controlling the barriers to the behaviour. A person's self-efficacy can control the ability in acting out the persuaded behaviour (Mamman et al., 2016). In the case of fast-food consumption, perceived behavioural control may highlight how a student's access to fast-food outlets and the availability of their pocket money may influence their consumption of fast-food. Besides, the significance of perceived behavioural control in predicting an individual's behaviour has been pointed out by TPB's theorist Icek Ajzen, who stated a behaviour will surely be performed when the individual's behavioural intention is strengthened by the perceived behavioural control when there are fewer difficulties and more resources at hand (Ajzen & Madden, 1986).

### **Relationship Between Theory of Planned Behaviour and Fast-Food Consumption**

Theory of Planned Behavior (TPB) proposes that individual's behavior is driven by behavioral intentions, are determined by individuals' attitude, subjective norms as well as perceived

behavioral control (Ebadi et al., 2018). Researchers have found fast-consumption behaviour is reasonably related to TPB (Mirkarimi et al., 2016). Specifically, they have discovered that behavioural intention is strongly and positively related to fast-food consumption behaviour. Likewise, a study has emphasized its results, demonstrating how behavioral intention of students in consuming fast food was correlated with prominent aspects such as the affordability of its price, great taste, convenience and food consumption (Syafiqah et al., 2018). Moreover, it has been widely accepted in previous studies that individuals' fast-food consumption can be influenced by their attitudes. According to Saraniya and Kennedy (2015), they found that there was a positive significant relationship between fast-food consumers' attitudes and their food consumption. Individuals' emotions play a central role in the development of their attitudes towards food consumption (Kashif et al., 2015). This reflected how feelings and emotions affects the attitude of the individuals in consuming food which may as well be applied in the case of fast-food.

Furthermore, it was widely known the importance of subjective norms' role in enhancing the attitude and purchase intention of consumers. One study has highlighted its finding on how fast-food consumption intention has positive correlation with subjective norms (Baghianimoghadam et al., 2016). Later, another recent study has found a similar finding whereby purchase intention and attitude were found to be significantly influenced by subjective norms of the consumers (Nguyen et al., 2020). Lastly, the correlation between perceived behavioural control and fast-food consumption behaviour has been highlighted in previous researches. The presence of various food preparation tools may increase the individuals' perception of their abilities to implement healthy changes (Hardin-Fanning & Ricks, 2017). In comparison to fast-food, the home cooked meal is inconvenient and has become the barrier for the individuals to cook with raw ingredients (Lavelle et al., 2016). By using variety of food preparation tools, married couples started to eat more vegetables because now they are easier to be prepped as compared to before (Hardin-Fanning & Ricks, 2017). Fast-food consumption intention was negatively related to perceived behavioral control, which implied that people with greater control over the amount of fast-food consumption had lower intention to consume it (Baghianimoghadam et al., 2016).

### Conceptual Framework

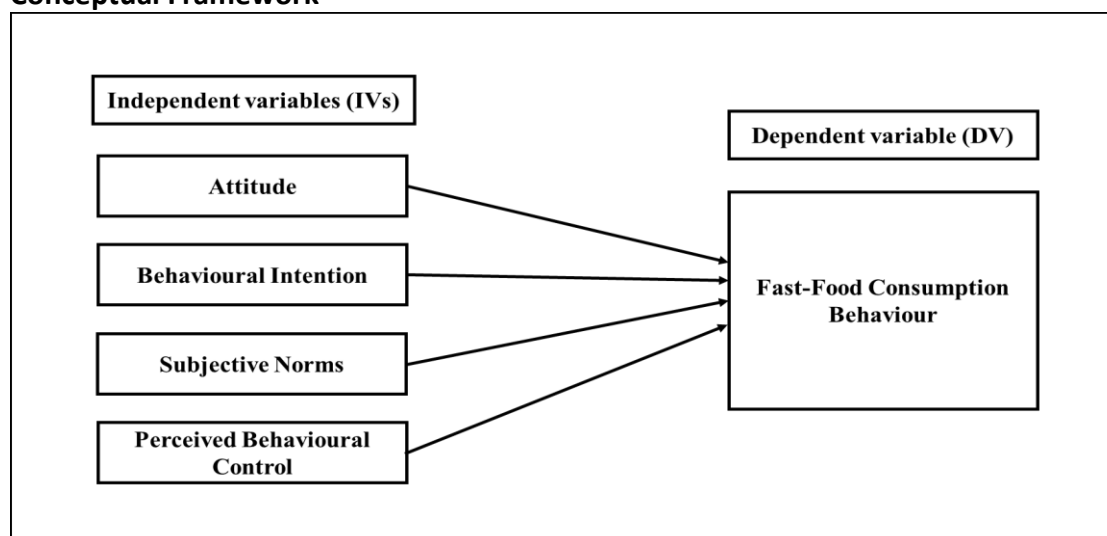


Figure 1: Conceptual Framework on Behavioural Determinants of Fast-Food Consumption Behaviour

In accordance to the literature review, four hypothesis have been formulated to achieve the objectives of this study

- H<sub>1a</sub> There is a relationship between attitude and fast-food consumption behaviour among undergraduate students in UMK City Campus.
- H<sub>1b</sub> There is a relationship between behavioural intention and fast-food consumption behaviour among undergraduate students in UMK City Campus.
- H<sub>1c</sub> There is a relationship between subjective norms and fast-food consumption behaviour among undergraduate students in UMK City Campus.
- H<sub>1d</sub> There is a relationship between perceived behavioural control and fast-food consumption behaviour among undergraduate students in UMK City Campus.

## Methodology

A cross-sectional study was applied as the research design in order to identify the relationship between attitude, behavioural intention, subjective norms and perceived behavioural control (dimensions of Theory of Planned Behaviour) towards fast-food consumption behaviour among undergraduate students in Universiti Malaysia Kelantan (UMK) City Campus. UMK City Campus was solely selected by the researchers as the population, as it is the only tertiary educational institution in Kelantan that has vast variety of fast-food which are accessible in walking distance from the university compound for example McDonald's, Pizza Hut, KFC and many others. This research design will help the researchers to measure the relationship of variables in a defined population (Wang & Cheng, 2020).

Besides, the sampling method used for this study was quota sampling. This type of sampling method was applied as the researchers want the results to be generalizable to the population as quota sampling will enable the samples to be selected according to the probability proportionate of the population's distribution (Rukmana, 2014). In this study, the researchers have divided the respondents or samples into subgroups of programs. The subgroups comprised of four programs; SAB (Bachelor in Islamic Banking and Finance), SAL (Bachelor in Logistics and Distributive Trade), SAK (Bachelor in Commerce) and SAR (Bachelor in Retailing) from Faculty of Entrepreneurship and Business (FKP), while three programs from Faculty of Hospitality, Tourism and Wellness (FHPK) which were SAW (Bachelor in Wellness), SAP (Bachelor in Tourism) and SAH (Bachelor in Hospitality). The reason why the researchers used quota sampling was because the results would be generalizable for the population of undergraduate students in UMK City Campus. In brief, the population of this study was 5162 undergraduates and the sample size would be 357 students by referring to (Krejcie and Morgan, 1970). Subsequently, the researchers decided on the quota for each seven programs of 51 respondents respectively for SAB, SAL, SAK, SAR, SAH, SAW, and SAP. Furthermore, as this study was a quantitative approach, a set of self-administered questionnaires was used as the instrument. Nevertheless, as the data collection procedures have taken place during the pandemic Covid-19, thus the questionnaire was transformed into an online survey which was in the form of google form. The data was collected within three weeks period and the researchers managed to get 357 responses by the end of the third week.

## Findings

Table 1 showed the results of the correlational analysis which will be interpreted by using guidelines on the Pearson Correlation value ( $r$ ) by Cohen as the researcher will explain the direction and strength of relationship for the study's variables which were the dimensions of Theory of Planned Behaviour and fast-food consumption behaviour (Cohen, 1988). The

findings discovered that there were significant positive relationships between attitude, behavioural intention, subjective norms and perceived behavioural control towards the fast-food consumption behaviour among students from Faculty of Entrepreneurship and Business ( $r=.646, p<.01; r=.649, p<.01; r=.549, p<.01; r=.597, p<.01$  respectively) (see Table 1). On the other hand, results also showed that there were significant positive relationships between attitude, behavioural intention, subjective norms and perceived behavioural control towards the fast-food consumption behaviour among FHPK's students ( $r=.744, p<.01; r=.702, p<.01; r=.686, p<.01; r=.682, p<.01$  respectively).

These outputs also confirmed that the dimensions of TPB were strongly related to fast-food consumption behaviour; reflecting how individuals' attitude, behavioural intention, subjective norms and perceived behavioural control can influence their fast-food consumption behaviour. Cited by Didarloo et al (2022), eating habits and behaviours can be predicted by TPB, which has also garnered the researchers' attention in recognizing beliefs and norms that are related to the fast-food consumption. Nevertheless, correlational analysis results involved FHPK showed that it has higher coefficient values as compared to FKP, which may be due to having a wellness program in the faculty, reflecting they are more health conscious and have better health awareness. Through various activities conducted by the wellness program, may enhance the awareness of the respondents about the fast-food consumption behaviour and its side effects. According to Tosun and GURce (2018), in spite of desiring unhealthy food, consumers with health consciousness will reduce their consumption of these food. Therefore, research objective one was achieved and hypothesis H<sub>1a</sub>, H<sub>1b</sub>, H<sub>1c</sub> and H<sub>1d</sub> were supported.

Table 1

Correlations between Theory of Planned Behaviour and Fast-Food Consumption Behaviour

Faculty	Variables		Attitude	Behavioural Intention	Subjective Norms	Perceived Behavioural Control	Fast Food Consumption Behaviour
FKP	Attitude	r-value	1	.716**	.679**	.814**	.646*
		Sig. (2-tailed)	-	.000	.000	.000	.000
	Behavioural Intention	r-value	.716**	1	.635**	.688**	.649**
		Sig. (2-tailed)	.000	-	.000	.000	.000
	Subjective Norms	r-value	.679**	.635**	1	.722**	.549**
		Sig. (2-tailed)	.000	.000	-	.000	.000
Perceived Behavioural Control	r-value	.814**	.688**	.722**	1	.597**	
	Sig. (2-tailed)	.000	.000	.000	-	.000	
Fast Food Consumption Behaviour	r-value	.646**	.649**	.549**	.683**	1	
	Sig. (2-tailed)	.000	.000	.000	.000	-	
FHPK	Attitude	r-value	1	.773**	.714**	.790**	.744*
		Sig. (2-tailed)	-	.000	.000	.000	.000
	Behavioural Intention	r-value	.773**	1	.701**	.738**	.702**
		Sig. (2-tailed)	.000	-	.000	.000	.000
	Subjective Norms	r-value	.714**	.701**	1	.788**	.686**
		Sig. (2-tailed)	.000	.000	-	.000	.000
	r-value	.790**	.738**	.788**	1	.682**	



Perceived Control	Behavioural	Sig. (2-tailed)	.000	.000	.000	-	.000
Fast Food Consumption Behaviour		r-value	.744**	.702**	.686**	.682**	1
		Sig. (2-tailed)	.000	.000	.000	.000	-

\*\*Correlation is significant at the 0.01 level (2-tailed)

Results of multiple regression analysis for determinants of fast-food consumption behaviour were tabulated in Table 2, comparing FKP and FHPK. Both faculties were demonstrated no collinearity problem in which the values for tolerance were below than one as well as the values of variance inflation factors (VIF) were below 10. As for Faculty of Entrepreneurship and Business (FKP), it was discovered that the  $R^2$  value was .532, in which all dimensions of TPB such as attitude, behavioural intention, subjective norms and perceived behavioural control explained 53.2% of the variance (R square) for fast food consumption behaviour, with sig. F value of .000. Plus, it was also stated in the table that the value for Durbin Watson was 1.928, which can be considered as good as it was in the range of 1.5 to 2, in line with the assumptions for multivariate correlation analysis. The findings have found that perceived behavioural control was the strongest predictor towards fast-food consumption behaviour ( $\beta=.367$ ,  $p<.05$ ), followed by behavioural intention ( $\beta=.302$ ,  $p<.05$ ). Meanwhile, attitude and subjective norms were found to have no effect towards the consumption behaviour of FKP's students. According to Hasan and Suciarto (2020), food purchase intention can significantly and positively affected by individual's perceived behavioural control. Though most previous studies had related individual's perceived behavioural control to intention and not the actual behaviour itself, which in reality; the intention was closely accepted as the proxy of the actual behaviour. Hence, companies have used consumers' intention to predict their future marketing strategies (Balau, 2018).

Further, for Faculty of Hospitality, Tourism and Wellness (FHPK), it was found that the  $R^2$  value was .621, in which all dimensions of TPB such as attitude, behavioural intention, subjective norms and perceived behavioural control explained 62.1% of the variance (R square) for fast food consumption behaviour, with sig. F value of .000. Though  $R^2$  values for both FKP and FHPK reflect the independent variables explained more than 50% of the dependent variable, FHPK has higher value as compared to FKP's. Meaning to say, more than 60% of fast-food consumption behaviour can literally be explained by FHPK students' attitude, behavioural intention, subjective norms and perceived behavioural control. Moreover, the value of Durbin Watson for FHPK was 1.989 and it was within the good value range of 1.5 to 2. The results have revealed three dimensions of TPB have significant influence towards the fast-food consumption behaviour. Attitude with the highest beta value of .381 was found to be the greatest predictor of consumption behaviour followed by subjective norms and behavioural intention ( $\beta=.232$ ,  $p<.05$ ;  $\beta=.217$ ,  $p<.05$  respectively). In relation to food domain, intention has often shared the greatest association to individual's attitude (McDermott et al., 2015) which was also found to be influenced by the said variable (Nystrand & Olsen, 2020). In contrast to FKP, perceived behavioural control has no effect towards the students' consumption behaviour. Nonetheless, behavioural intention was revealed as the sole determinants which may affect the fast-food consumption behaviour for both faculties, indicating that the students' intention may contribute to the actual behaviour of consumption. According to Seo et al (2011), behavioural intention and perceived behavioural control were significantly associated to fast-food consumption behaviour. This was currently supported by a study done among Medical Sciences students whereby behavioural intention was found to be highly correlated to fast food consumption with behavioural intention

variable demonstrated greater significance in the association (Didarloo et al., 2022). Therefore, it can be concluded that based on this analysis, it was found that students from each faculty either FKP or FHPK, have contradicting determinants of their fast-food consumption behaviour, marking the achievement of research objective two.

Table 2  
*Multiple Regression Analysis*

Faculty	Independent variables	Standardized Coefficients Beta	t	Sig.
FKP	Attitude	.126	1.387	.167
	Behavioural Intention	<b>.302*</b>	4.1000	.000
	Subjective Norms	.007	.095	.924
	Perceived Behavioural Control	<b>.367*</b>	3.980	.000
	R Square	.532		
	F	56.494		
	Sig. F Value	.000		
	Durbin Watson	1.928		
FHPK	Attitude	<b>.381*</b>	4.071	.000
	Behavioural Intention	<b>.217*</b>	2.520	.013
	Subjective Norms	<b>.232*</b>	2.680	.008
	Perceived Behavioural Control	.038	.381	.704
	R Square	.621		
	F	60.680		
	Sig. F Value	.000		
	Durbin Watson	1.989		

\*Significant at 0.05 level

### Conclusion and Recommendations

In a nutshell, every dimension of Theory of Planned Behaviour is strongly correlated to fast-food consumption behaviour for students in Faculty of Entrepreneurship and Business (FKP) as well as Faculty of Hospitality, Tourism and Wellness (FHPK). Nonetheless, FKP students' consumption behaviour was found to be affected by the dimensions of perceived behavioural control and behavioural intention. This is because the students believed that their abilities in controlling their actions as well as their intention of consuming will lead to the actual consumption behaviour. In contrast, FHPK students' consumption behaviour will be affected by the dimensions of attitude, subjective norms and behavioural intention. These students' fast-food consumption behaviour will be greatly affected by their attitude, the norms of people around them and their intention to consume fast-food.

Regardless the study's findings have indicated that undergraduates' fast-food consumption behaviour can be influenced by their intention, various determinants may reflect the intention. As the subjectivity of intention is undoubtedly arguable to be discussed, the health awareness and consciousness should be the top priority for the undergraduates. They still have a long journey to be work out with their life, hence they should be highly

motivated to pursue their lifestyle in a healthy way. Based on the regression analysis, it is recommended for FHPK students to be aware of their own attitude in evaluating the fast-food consumption behaviour. Negative side effects of the food such as obesity, cardiovascular diseases and others may emphasize the students; the goodness of not consuming the fast-food especially on regular basis. According to Fuhrman (2018), individuals are the ones who have the power to change their eating habits by directing significant attention and effort towards the problem. In other word, people need to be individually in charged with how they eat and what they choose to eat. Besides, the same recommendation may also be suggested to FKP students as they really need to learn and understand better about fast-food so that they can manage their perceived behavioural control towards fast food consumption behaviour. Slightly different to FHPK, the consumption behaviour of FKP students cannot be affected by their attitude, rather it can be affected by their perception of the difficulty in getting the fast-food. Fast-food accessibility is significantly known as one of the determinants of the fast-food consumption behaviour (Saghaian & Mohammadi, 2018). Though this factor is somewhat uncontrollable by the students especially for UMK City Campus where it is surrounded with various types of fast-food outlets, but the students at least can put ahead their health status as the main reason to not getting any fast food either from the outlet or from the convenience stores.

As for future studies, they are recommended to be conducted in every campus of UMK and if it is possible, it would be better to be conducted in every tertiary educational institution in Malaysia since students' eating habits may be different between each institution. It is also recommended for the future researchers to use probability sampling technique to ensure better generalizability of the study's respondents. This may as well reduce sampling bias that will be most likely to happen in non-probability sampling techniques. In addition, the researchers can also use other determinants for instance food accessibility, financial constraint and so forth, rather than behavioural theory dimensions as the independent variables.

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