
The Effect Of Packaging Design Elements On Youth Purchase Intention Of Junk Food

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This research provides new knowledge on the purchase intention towards junk foods. The main purpose of this research study is to examine the packaging design elements as a determinant factor to purchase junk food among youth consumer that might be one of the most essential variable in marketing field. One of the aims of this study is covering the shortcomings of previous studies that didn't observe main factors that influence the consumer purchase intention toward junk food. The various packaging elements (packaging colour, packaging graphic, packaging size, packaging material and packaging label) have been conceptualized into integrated frameworks to investigate the factors that influence consumer purchase intention toward junk food products amongst youth. Data were collected from sample size of 322 respondents mainly degree students from the faculty of Hotel Management and Tourism, and Faculty of Engineering in Universiti Teknologi MARA, Penang. This study is further validated through a survey method used of questionnaire distribution. The data were further process and analyse using Statistical Package for Social Sciences (SPSS) version 22.0. The findings revealed that only four elements which are packaging colour, packaging graphic, packaging size and packaging label are positively significant with consumer purchase intention toward junk food while the packaging material was not significant with the consumer purchase intention toward junk food.

Introduction

Nowadays, Malaysia is an increasing income group country (Moore, 2001) as the Malaysia's expectation economy growth market at 4% for the April-June quarter 2016 (Kok, 2016). The existence of imported and local products has made a food retail market in Malaysia become faster and larger. In addition, today the retail sales of food and beverages amount up to US\$15 billion and by the year 2015, it was predicted to grow up to US\$21.17 billion (Cottrell, 2013). According to Hoover's (2013), in Snack Foods Manufacturing report, the profit of the world junk foods market is estimate to reach almost \$300 billion.

Then, the mostly finding was knowledgeable consumers are more interested with the product with unique packaging but are not interested with the external product in the market. As this situation give a significant problem for the company to be noticeable from the others in term of newness and provide benefits to their end customer. Therefore, packaging elements are the essential factors that influence the consumer purchase intention and perception toward food products (Enneking, Neumann, & Henneberg, 2007; Wells, Farley, & Armstrong, 2007; Rundh, 2009; J. Ali, Kapoor, & Moorthy, 2010; and & Gofman, Moskowitz, & Mets, 2010).

Packaging is considered as one the most influential factors in retail transaction made because it communicates to consumers (Rundh, 2009) and it is also assist the retail marketing. Besides that, packaging creates first impression of the product it contains and the image the customer get on the packaging transfer it to the product (Silayoi & Speece, 2004). Additionally, when the consumer is unsure at the purchase transaction, the packaging elements turn out to be the dominant factors in the selection to purchase, as it meet directly to the consumer to make decision making (Silayoi &

Speece, 2007). For that reason, to attract the consumer to purchase the product, all packaging elements have to be together (Ampuero & Vila, 2006; Ali et.al, 2010; Ares & Deliza, 2010).

The manufacturers of a company were forced to come up with new packaging materials and design to increase their sales as the consumers require for different packaging. In a business marketing efforts, packaging design plays a crucial role as it is clarify as the wrappers and containers for a product. The products marketability with the new packaging design can be extend if the developers and packaging designers use their professional creativity and experience. For that reason, there are variety selections of snacks' packaging design that are accessible on the supermarkets' shelves.

Problem Statement

Malaysia is now experiencing rising of junk food imports, which this situation will give negative impact on the market for local junk food products. Movement of imported products can never be avoided in this error of globalization rather should be taken as a challenge to improve local products (Baffour A. & Amal, 2011). Thus, SMEs need to implement more expertise along with marketing and quality of raw material as the packaging is one of the crucial areas.

For junk food processors and developers to be successful, they are required to process junk food product that will meet consumer demand and preferences. Most manufacturers of food product are at the small and micro scale (SME) whereby according to Dietz, Martin H., Matee, Stephen & Ssali (2000), this category of manufacturer has little knowledge on marketing. Awuah and Amal (2011) stated that, SME's in developing countries fail to compete with imported goods from advance countries as the consumers identify goods from advance countries tend to be better and innovative rather than the local goods.

In order to compete in the competition, SMEs from develop countries should be given priority to increase their innovative, creativity and capability to sell products and expand the market. Other than that, the role of packaging was to protect, handling, transport and maintenance of goods from the producer to the buyer. Then, the consumer purchase intention also has positive influence with packaging (Kuvykaite, Dovaliene & Navickiene, 2009). The vital issue that should be review when crafty a new packaging is the consumer purchase intention and consumer preferences. There are many variables affect the consumers' awareness and purchase intention (Klimchuk & Krasovec, 2013).

The critical importance of packaging design has been increase rapidly in the competitive market conditions however situation of local products do not reflect that. The junk food packaging design however is becoming more challenging due to several variance trends in consumer preferences. This is because some consumers are focus more on label information, as they become more aware about nutrition issues and others are only attracted by visual elements, which is this can reduce their time spending on shopping. However, consumers are still the most essential character in implementing and developing design packages. Therefore, the lead factor for packaging design is to divine the consumers' background (Smith, 2011).

There is also an issue about the products' packaging material standard. The materials that have been used in crafty a junk food packaging include metals, glass, plastics and paperboards. Moreover, due to the low cost of materials plastics have been used in food packaging as it has better functional advantages than traditional materials. But, the plastics contains residual monomer and elements which are the plasticizers, stabilizers, and condensation components such as bisphenol A that will affect the individual health matter (McKillup, 2005).

The size of packaging was also an issue to the consumers. In current years, there are many complaints from the consumers regarding the reduced portion of food in products but the price of the products remains the same. Some manufacturers strategically maintain the normal packaging and price with reduced portion size from before while some other manufacturers were decided to

introduce new smaller size containers at normal price. The World Health Organization has continuously warned the public that obesity is a leading the global death (Don, 2018). That is why many junk food manufacturers have realized the importance of health trend among the consumers, thus started to reduce the portion size and reformulate their food to contain less salt, fat and calories (Don, 2018).

Packaging labels play an essential role to increase the awareness of the buyer's information regarding nutrition value of a food product and it react as the benchmark to assist consumer in balancing food intake. Other than that, labels at the food also can help individual to maintain caloric intake (Cummings, S., Parham, E. S., & Strain, 2002). Consumers have put a mind set in their mind that the organic foods found on food labels meant to be nutritious than the normal products. Manufacturers today, tend to use the word "organic" referring to processed foods (Donsky et al., 2011). Furthermore, the nutritional values are zero when the natural ingredients is being processed. Unfortunately, the consumers are reveal to many of health issues from time to time when they take high processed foods (Kii & Lin, 2016). Then, this problem must be listed properly on the labels to ensure comprehension among the young consumers.

Therefore, in the consumer purchase intention toward junk food there were variance of issues arise which are rising of junk food imports that affect the local junk food, the packaging material quality of junk food as many manufacturers nowadays tend to use plastics, the reducing of portion size of junk food but the price remain the same and lastly is the packaging labels of junk foods.

Research Objectives

The objective of this study was to examine the factors that influenced the consumer purchase intention toward junk food.

1. To determine whether the packaging colour is positively significant to the consumer purchase intention of junk food.
2. To determine whether the packaging graphic is positively significant to the consumer purchase intention of junk food.
3. To determine whether the packaging size is positively significant to the consumer purchase intention of junk food.
4. To determine the packaging material is positively significant to the consumer purchase intention of junk food.
5. To determine whether the packaging label is positively significant to the consumer purchase intention of junk food.

Purchase Intention

Intention is defined as an individual's motivation or willingness to perform or not to perform any given behaviours (Klama, 2013). In the Theory of Planed Behaviour, intention refers as a predictor of behaviour which show that if a person has stronger intention to catch in a behaviour, he would then more likely to perform that behaviour (Ajzen, 1991). Nowadays, many companies tend to use purchase intention to forecast the selling of new products and repeat purchasing of existing products (A. Ali & Ahmed, 2011). Other factors such as celebrity endorsement and product packing may possess an influence on the purchase intention of consumers. Besides that, Younus, Rasheed & Zia (2015), state that there was a positive relationship among celebrity endorsement, product packing and purchase intention. Likewise, packaging of product like colourful packing or grotesque shape affects purchase intention as it attracts the attention of consumers.

Silayoi & Speece (2004), state that all these can be categorized into two categories which are visual and informational elements. The visual elements consist of graphics, size or shape of packaging, and interact more with the affective side of decision-making. Informational elements relate to

information provided and technologies used in the package, and are more likely to interact with the cognitive side of decisions (Silayoi & Speece, 2004).

Packaging Colour

Consumers favour certain colours for different product categories as they study the colour associations (Grossman & Wisenblit, 1999). Besides, through knowledge of how colours and colour combinations are recognize in each location then the colours of certain package, product design and logo should be conduct from one market to another (Madden et al., 2000). Packaging colour on the package help to set moods and attract attention as colour act as crucial role in consumers' decision making process (Silayoi & Speece, 2004). Meanwhile, Schoormans and Robben (1997), state that the colour function is to attract the consumers' attention when they want to purchase the products.

Another one study found that dark and cold colours of packaging can be recognize with clear aesthetics and expensive, while pale or white coloured packaging refer to the accessible products that are directed towards price sensitive, then red packaging were recognize as guaranteed and safe products (Ampuero & Vila, 2006). Most importantly, not only colour was essential when it comes to captivate the consumers' attention. In fact, colours also have the capability to maintain attention (Dobson & Yadav, 2012).

H1: There is a positive relationship between packaging colour and consumer purchase intention toward junk food.

Packaging Graphic

The food label of graphical components which were image and colour could particularly affect the consumers' purchase intentions and belief (Eldesouky & Mesias, 2014). In addition, Bloch (1995) stated that consumers' cognitive and affective responses were influence by the design of the product packaging. Rundh (2009) stated that, graphics are becoming essential in modern marketing activities as striking or appealing visual make the products noticeable on the shelf and captivate the consumer's attention. Underwood et al., (2001) claims that graphic attributes can help consumers to have intention to purchase.

Previous researches on the topic of packaging characteristics (Puyares et al., 2010; Becker et al., 2011) had found that visual design parameters such as packaging colour and packaging shape affect consumers' perceptions and expectations. Bone & France (2001) also suggested that the graphical component of a food label (colour and image) could significantly influence the beliefs and purchasing intentions of the consumers. Therefore, graphics on packaging have the potential to influence consumers' product-related attitudes and behaviors (Westerman et al., 2013). Based on above discussion, hypothesis is proposed

H2: There is a positive relationship between packaging graphic and consumer purchase intention toward junk food.

Packaging Size

Consumer judgment and decisions were affected by the packaging shape, size and length of the products, but in easily uncovered ways. For the consumers to make volume judgements, they use these things to clarify the visual process. Packaging size and shape are considered very important when designing a package to attract the attention of consumer mind. Similarly, according to (Silayoi & Speece, 2004) package length, size, and shape also affects consumer's decisions, although not always in an easy ways. Consumers recognize more packages' size to be larger, even they can experience true volume and always buying these packages. This is supported by Raghubir

& Krishna (1999), that shows shape and package of the product is important in influencing purchase decision even when the size is not what they expect.

Different sizes also are perceived differently depending on purchasing power, different class of people and depending on the size of the family members. Some consumers tend to compare size in relation to the price if it come up with reasonable price (Prendergast and Marr, 1997). It also depends on the product involvement and alternative present.

H3: There is a positive relationship between packaging size and consumer purchase intention toward junk food.

Packaging Material

The type of the material, environmental protection, economic growth and packaging design of the product has become the option for packaging material selection (Brozovic et al., 2017). The most frequently packaging materials used are plastic, glass, paper, cardboard, composites and metals (Marsh & Bugusu, 2007).

Besides, the material of the package has affected the consumer purchase decision of the product and high quality package attract consumer than low quality package (Mitul D. & Parmar, 2012). In other aspect, material is also related to convenience and usability. Glass, as a package material attracts consumers with their protective structure and transparency, whereas plastic and paperboard packages attract consumers with their resistance to physical impacts and easy to-use abilities (Aday & Yener, 2014). Other than that, Klaiman et al (2016) presented that 34% of users emphasized the usability of packaging and packaging material, while 31% of the users the greatest advantage ascribed to materials that are easily degradable and are not environmentally harmful.

Brozovic et al., (2017) stated that the tendency for a particular material is related to its characteristics in terms of packaging usability. Arboretti & Bordignon (2016), investigated the qualitative features of the packaging, such as reusability and the presence of lids, which proved to be extremely attractive when choosing a product and considering how to reuse it.

H4: There is a positive relationship between packaging material and consumer purchase intention toward junk food.

Packaging Label

The nutrition labelling information help consumer to make an informed choice and influence the consumers' buying preferences (Raof, Othman & Mara, 2017). Label can raise consumer's awareness towards product information and increase product transparency because it provides additional information about benefit of product. Consumers today have increased their desire for more accurate, precise and reachable information on food labels (Deliza, MacFie, & Hedderley, 1999).

Label information on food packaging act as main channel for the resolution made at the purchase point as Schoormans and Robben (1997), cited that the printed data or information on packaging play a crucial role at the purchase transaction. However, Clement (2007), argues that consumer do not spend much time on food labels due to time pressure (Silayoi and Speece, 2004).

Sometimes many information can mislead consumers and lead to confusion (Clement, Skovgaard A., & O'Doherty Jensen, 2012). According to Rozin (1990) as cited in Rundh (2009) showed that if the consumer know the information on labels is false, then it can influence their preferences. Thus, this shows that the labels on junk food packaging are important factor for the consumer to purchase junk food.

H5: There is a positive relationship between packaging label and consumer purchase intention toward junk food.

Research Model

Figure 1. *The research model represents the relationship of packaging design elements toward the purchase intention of junk food.*

Research Methodology

Descriptive research was used in this study which to explain the features of a phenomenon or population being studied. Correlational research which is to identify the relationship between variable was the type of investigation. The populations for this research were the bachelor degree students from the faculty of engineering and faculty of hotel management & tourism at UiTM Permatang Pauh, Penang. Besides that, the faculty of engineering consists of civil engineering, electric engineering, mechanical engineering and chemical engineering. The total numbers of population of this study were 2,023 respondents. Then, the number of respondents that have been selected as sample size are 322 persons.

The researcher use stratified sampling in this study to conduct the survey among the students of UiTM, Penang. In more emphasis, this study used stratified sampling, which is a technique involves with two-step sampling process which are firstly, the population is divided into subgroups called strata and secondly the elements are then randomly selected from each stratum (Naresh K. M., 2012).

For this research study, a questionnaire was designed based on the format of Likert Scale to measure the variables. Five-scale point was used in analysing data of this study ranging from 1 (strongly disagree) to 5 (strongly agree). The questionnaires have three (3) part which were section A, B, and C. Then, section A consists of demographic questions, section B consists of dependent variable questions and section C consist of independent variable questions.

The questionnaire form consist of 32 questions and were prepared in Malay and English languages. Besides that, the questionnaires were distributed to 322 degree students from faculty of engineering, and hotel management & tourism in UiTM, Penang. Researcher used Statistical Package for Social Science version 22 (SPSS 22.0) for the data collection procedure.

Data Analysis and Findings

The researcher distributed 322 set of questionnaires to the respondent in order to get data from them. All 322 questionnaires that had been distributed were collected which gives a 100% rate. The role of data analyzing was to obtain the data sense, check goodness of the data and to hypotheses developed for the study (Sekeran & Bougie, 2010).

Response Rate

The number of questionnaire which 322 questionnaires was prepared by the researcher and the questionnaire were distributed to the respondents. Then, all 322 questionnaires that had been distributed were collected which gives a 100% rate. Table 1 shows the number of respondent who involved in this research:

	Sample Size (n)	Percentage (%)
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Total of questionnaire prepared	322	100
Total of questionnaire distributed	322	100
Total of questionnaire returned	322	100
Total of questionnaire usable	322	100

Table 1. Questionnaire's Summary (n=322)

To increase the possibility of answering the questionnaires distributed, the researcher used printed questionnaires, as they have competent to answer all the questions of the questionnaire without missing any value.

Programme	Questionnaire distributed	Questionnaire returned
Civil Engineering	97	97
Electrical Engineering	101	101
Mechanical Engineering	50	50
Chemical Engineering	44	44
Hotel Management & Tourism	30	30

Table 2. Summary of questionnaire distributed by stratified sampling technique (n=322)

Table 2 shows the researcher need 97 students from civil engineering programme, 101 students of electrical engineering programme, 50 students from mechanical engineering programme, 44 students from chemical engineering programme and 30 students of hotel management and tourism programme to participate to answer this questionnaire.

Demographic Analysis

The individual data or characteristics of the respondents of this study were obtained for the demographic analysis. Then, six demographic variables were collected for this research which consist gender, age, programmes, income level, monthly spending on junk food and involvement in business.

Demographic	Categories	Percentage (%)
Gender	Male	21.4
	Female	78.6
	Total	100.0
Age	18-25 years old	93.8
	26-30 years old	6.2
	Total	100.0
Programme	Civil Engineering	30.1
	Electric Engineering	31.4
	Mechanical Engineering	15.5
	Chemical Engineering	13.7
	Hotel Management & Tourism	9.3
	Total	100.0
Income level	Below than RM300	55.3
	RM301-RM600	22.4
	Above than RM600	22.4
	Total	100.0
Monthly spending on Junk food	Below than RM10	28.6
	RM11- RM20	33.5
	Above than RM20	37.9
	Total	100.0

Involvement in business	Yes	16.1
	No	83.9
	Total	100.0

Table 3. Result of the respondents Demographic Characteristic

Table 3 above shows the analysis of demographic among respondents who participated in the survey that were held at UiTM, Penang in term of frequency and percentage. Based on the result above, there were about 69 male respondents (21.4%) and 253 female respondents (78.6%). Then, the majority of the respondents' age were 18 to 25 years old which was 302 respondents (93.8%), followed by 26 to 30 years old which was 20 respondents (6.2%).

Besides that, in term of programme, it was divided into five categories which were civil engineering, electric engineering, mechanical engineering, chemical engineering, hotel management and tourism. The percentage of respondents for civil engineering was 30.1% (97 respondents), electric engineering was 31.4% (101 respondents), mechanical engineering was 15.5% (50 respondents), chemical engineering was 13.7% (44 respondents) and hotel management and tourism was 9.3% (30 respondents).

Then, in term of income level, majority of the respondents received their income below than RM300 which was 55.3% (178 respondents), followed by second range of income level RM301 to RM600 which was 22.4% (72 respondents) and third income range of RM600 and above which was 22.4% (72 respondents). Besides, the result on the table above, shows that majority of the respondents spend their monthly spending on junk food above than RM20 which was 37.9% (122 respondents), followed by monthly spending on junk food from RM11 to RM20 which was 33.5% (108 respondents), the least monthly spending on junk food was below than RM10 which was 28.6% (92 respondents). Other than that, a result above shows that majority of the respondents does not involve in business which were 83.9% (270 respondents), then only 16.1% (52 respondents) involve in the business.

Reliability Analysis

Reliability analysis was defined as measurement made by the researcher and the result produced leads to consistency over the time (Malhotra, 2010). The reliability less than 0.60 were considered to be poor, those in the range of 0.70 to be acceptable and that reliability over 0.80 to be good (Sekeran & Bougie, 2010).

Variable	Number of items	Cronbach's Alpha	Remarks
Purchase intention	5	0.66	Moderate
Packaging colour	4	0.74	Good
Packaging graphic	4	0.69	Moderate
Packaging size	4	0.70	Good
Packaging material	4	0.71	Good
Packaging label	5	0.75	Good

Table 4. Reliability Result (n=322)

As table 4 reveals the result of reliability analysis of consumers' purchase intention towards junk food for dependent variable and all independent variables which consist of packaging colour, packaging graphic, packaging size, packaging material and packaging label.

For the dependent variable which is consumer purchase intention toward junk food, the Cronbach's Alpha value is 0.66 (66%) consist 5 number of items. This value of Cronbach's Alpha shows that the reliability was moderate and acceptable. As all the items were acceptable and able to measure the

purchase intention of consumer towards junk food.

Besides that, packaging colour is the independent variable, which the Cronbach's Alpha value is 0.74 (74%) consist 4 numbers of items that indicate this variable. These values of Cronbach's Alpha mean that the reliability is good as each item are correlated to one another.

Meanwhile, packaging graphic is the independent variable which the Cronbach's Alpha value is 0.69 (69%) consist 4 numbers of items that indicate this variable. This value of Cronbach's Alpha means that the reliability are moderate and acceptable. All items are acceptable and measureable.

Next independent variable which is the packaging size, the Cronbach's Alpha value is 0.70 (70%) consist 4 number of items that indicate this variable. This value of Cronbach's Alpha means that the reliability is good as each items are correlated to one another. Furthermore, the packaging material which is one of independent variable, the Cronbach's Alpha value is 0.71 (71%) consist 4 number of items that indicate this variable. This value of Cronbach's Alpha means that the reliability is good as each items are correlated to one another. The last independent variable which is packaging label, the Cronbach's Alpha value is 0.75 (75%) consist 5 number of items that indicate this variable. This value of Cronbach's Alpha means that the reliability is good as each items are correlated to one another.

Descriptive Statistic

Descriptive statistics such as minimum, maximum, means and standard deviation were obtained for the interval scaled dependent variable and independent variables. The result is shown in the table below:

	N	Minimum	Maximum	Mean	Std.Deviation
Purchase intention	322	2.00	5.00	3.9795	.45311
Packaging colour	322	2.25	5.00	3.5536	.44042
Packaging graphic	322	2.25	5.00	3.6964	.48822
Packaging Size	322	2.50	5.00	4.0085	.48188
Packaging material	322	3.00	5.00	4.2298	.46066
Packaging label	322	2.20	5.00	3.7385	.54989

Table 5. Results of Descriptive statistic (n=322)

Table 5 above indicates the minimum, maximum, mean and standard deviation among the dependent and independent variables. Then, all variables used in the research study were measured on a Five-Likert Scale.

Besides that, the table above shows the minimum number of respondents answer for the dependent variable which the purchase intention was 2.00 while the maximum was 5.00. Next, the minimum and maximum number of the independent variables which the packaging colour was 2.25 and 5.00.

Then, for packaging graphic the minimum number was 2.25 while the maximum number was 5.00. Along with that, the minimum and maximum number of packaging material was 3.00 and 5.00 respectively. Lastly, for packaging label, the minimum number was 2.20 whereas the maximum number was 5.00. The highest mean score was the packaging material which is 4.2298 and the least mean score was packaging colour which is 3.5536. Meanwhile, the highest standard deviation was packaging label which is 0.54989 whereas the lowest standard deviation was packaging colour which is 0.44042. Standard deviation was used to determine the concentrated of data around the mean. Hence, the result shows that packaging label is less concentrated as it has higher number of standard deviation compare to packaging colour which is more concentrated.

Pearson’s Correlation Analysis

The direction, strength, and significance of the bivariate relationship between the variables were representative of the Pearson’s correlation. Then, table 3 showed the Rules of Thumb by Davis (1997) that measure the correlation between dependent and independent variables in this research study.

R-Value	Relationship Strength
0.70 and above	Very Strong Relationship
0.50 to 0.69	Strong Relationship
0.30 to 0.49	Moderate Relationship
0.10 to 0.29	Very Low Relationship

Table 6. Rule of Thumb by Davis (1997)

Variable	PC	PG		PM	PL	PI	Sig.
Packaging colour	-						.000
Packaging graphic	.466**	-					.000
Packaging size	.372**	.489**	-				.000
Packaging material	.325**	.433**	.398**	-			.000
Packaging label	.144**	.418**	.389**	.397**	-		.000
Purchase intention	.496**	.646**	.537**	.385**	.402**	-	.000

Table 7. Summary of Pearson Correlation Analysis (n=322)

Table 7 above present the correlation relationship between dependent variable which was purchase intention and five independent variables which were packaging colour, packaging graphic, packaging size, packaging material and packaging label. From the table above, there was moderate relationship between packaging colour and consumer purchase intention toward junk food ($r = 0.496, p = 0.000$).

Besides, the correlation between packaging graphic and consumer purchase intention toward junk food were strong and significantly correlates with each other ($r = 0.646, p = 0.000$). Increase in the packaging graphic will increase the consumer purchase intention toward junk food. Next, there was strong and significant relationship among packaging size and consumer purchase intention toward junk food ($r = 0.537, p = 0.000$). Increase in the packaging size will increase the consumer purchase intention toward junk food. Meanwhile, the correlation among packaging material and consumer purchase intention were strong and significantly correlates with ($r = 0.385, p = 0.000$). Moreover, there was moderate relationship between packaging label and consumer purchase intention toward junk food ($r = 0.402, p = 0.000$).

Regression Analysis

The regression analysis was used in this study to determine whether the independent variable describe the significant variation in the dependent variable.

Dependent Variable:
Consumer purchase intention towards junk food

Independent Variables:	Beta (β)	Significant Value
Packaging colour	.149	0.001
Packaging graphic	.378	0.000
Packaging size	.230	0.000
Packaging material	.040	0.403
Packaging label	.140	0.003
R2	.444	
Adjusted R2	.436	
F Change	50.571	

Table 8. Summary of Regression Analysis (n=322)

Table 8 provides the tabulated finding of the analyses on the relationships between independent variable which were packaging colour, packaging graphic, packaging size, packaging material and packaging label with dependent variable which was consumer purchase intention toward Junk food. The result shows that the factors of variance was 44% could influenced the consumer purchase intention toward junk food.

Additionally, the five factors which were packaging colour, packaging graphic, packaging size, packaging material and packaging label only explain 43.6% of variance in purchase intention (adjusted $R^2 = 0.436$), whereas 56.4% is explained by another variables which was not included in this study. Based on table 8, there was positively significant relationship between packaging colour and consumers' purchase intention toward Junk food and hypotheses were supported because ($\beta=0.149$, $p=0.001$). Therefore, the H1 hypothesis was accepted, these findings indicate that packaging colour were positively affected to consumers' purchase intention toward Junk food.

Referring to table 8, there was positively significant relationship between packaging graphic and consumers' purchase intention toward Junk food and hypotheses were supported because ($\beta=0.378$, $p=0.000$). Therefore, the H2 hypothesis was accepted, these findings indicate that packaging graphic were positively affected and important in influencing consumers' purchase intention toward Junk food. The table 8 shows, there was positively significant relationship between packaging size and consumers' purchase intention toward Junk food and hypotheses were supported because ($\beta=0.230$, $p=0.000$). Therefore, the H3 hypothesis was accepted, these findings indicate that packaging size were positively affected to consumers' purchase intention toward Junk food.

Based on the table above, it can be concluded that there was no significant relationship between packaging material and consumers' purchase intention toward ($\beta=0.040$, $p=0.403$). Therefore, the H4 hypothesis was rejected, these findings indicate that packaging material do not affected the consumers' purchase intention toward Junk food.

Table 8 also shows, there was positively significant relationship between packaging label and consumers' purchase intention toward Junk food and hypotheses are supported because ($\beta=0.140$, $p=0.003$). Therefore, the H5 hypothesis is accepted, these findings indicate that packaging label are positively affected to consumers' purchase intention toward Junk food.

Hypothesis Testing

Hypothesis	Statement	Result
H1	There is strong positively significant relationship between packaging colour and consumer purchase intention toward Junk food ($\beta = 0.149$, $p=0.001$). The findings indicate that	Accepted

	packaging colour of junk food influenced the consumer purchase intention toward Junk food.	
H2	There is strong positively significant relationship between packaging graphic and consumer purchase intention toward Junk food ($\beta = 0.378$, $p=0.000$).The findings indicate that packaging graphic of junk food influenced consumer purchase intention toward Junk food.	Accepted
H3	There is positively significant relationship between packaging size and consumer purchase intention toward Junk food ($\beta = 0.230$, $p=0.000$).The findings indicate that packaging size of junk food influenced consumer purchase intention toward Junk food.	Accepted
H4	There is no significant relationship between packaging material and consumers' purchase intention toward Junk food ($\beta = 0.040$, $p=0.403$).The findings indicate that packaging material of junk food are not affected the consumer purchase intention toward Junk food.	Rejected
H5	There is positively significant relationship between packaging label and consumers' purchase intention toward Junk food ($\beta=0.140$, $p=0.003$).The findings indicate that packaging label of junk food influenced consumer purchase intention toward Junk food.	Accepted

Table 9. *The survey result finalize hypothesis*

Conclusion

In conclusion, from the research study there were findings and results obtained which the aim is to answer the questions, research objectives and hypothesis of this research study. Besides, the findings were investigate on the dependent variables which is consumer purchase intention on junk food and each independent variables which were packaging colour, packaging graphic, packaging size, packaging material and packaging which to discover the relation between dependent and independent variables. This study objectives has been accomplished since the researcher have capability to examine the different factors that can affect the consumer purchase intention toward junk food.

This research study consists five objectives which to determine whether the packaging colour is positively significant to the consumer purchase intention of junk food. Second research objectives was to determine whether the packaging design is positively significant to the consumer purchase intention of junk food. The third objectives was to determine whether the packaging size is positively significant to the consumer purchase intention of junk food. The fourth objectives was to determine whether the packaging material is positively significant to the consumer purchase intention of junk food. Last objectives of this research was to determine whether the packaging label is positively related to the consumer purchase intention of junk food.

The results obtained reveals that there were four independent variables that affect the consumer purchase intention towards junk food which are packaging colour, packaging graphic, packaging size and packaging label. These variables have significant and positive relationship with consumers'

purchase intention towards junk food.

For future research, the researcher proposed to other researcher that they should use other population instead of the students which assist their study become more strong and reliable. In addition, for further research, the researchers should considered to increase their focus of study to different state in Malaysia such as Johor, Kuala Lumpur, Terengganu, Sabah and Sarawak. Therefore, by increasing the focus of study to different state in Malaysia, the result gained will be more comparable and become workable for consumer purchase intention toward junk food.

Moreover, researcher also suggest the other researcher to conduct the research study by using other independent variables which were consumers' lifestyle, knowledge, safety of the product packaging, eco-friendly and recyclable packaging in term of consumer purchase intention toward junk food to gain more significant and better result.

References