THE INFLUENTIAL EFFECTS OF PACKAGING DESIGN, IN-STORE PROMOTIONS AND PRICING ON CONSUMERS’ IMPULSE BUYING BEHAVIOR

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DECLARATION

I hereby declare that:

(1) This Research Project is the end result of my own work and that due acknowledgement has been given in the references to all sources of information be they printed, electronic, or personal.

(2) No portion of this research project has been submitted in support of any application for any other degree or qualification of this or any other university, or other institutes of learning.

(3) The word count of this research report is 18,279.

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Abstract

In this study, the area of concern would be the effects of packaging design, in-store promotion and price consciousness that influence consumers impulse purchase behavior in the grocery stores.

Every year manufacturers tend to offer new fast-moving consumer products into the market and it has created a more intense competitive environment for manufacturers and marketers. The first step of success for the new product is to gain the first trial purchase from the consumers. This is identified as impulse purchase. Hence, manufacturers and marketers will need to come up with strategies to attract consumers in-store to try out their new products and at the same time differentiate themselves from their competitors. Besides, manufacturers and marketers need to work alongside retailers in providing in-store promotion and setting the right price for their products. Thus, this generates attention of the researcher to investigate the key factors that influence consumer impulse purchase.

The main purpose of this study aims to determine the significant factors that influence consumers impulse purchase behavior in-store. The data for this study was collected by using Google forms online for the survey questionnaire distribution and storing. The Statistical Package for Social Sciences is being utilized to analyze the data collection from the survey questionnaire in this study. The study shows that in-store promotion and price consciousness does influence impulse purchase, while packaging design does not influence on consumer's impulse purchase. In addition, a few recommendations are presented to propose further study in this field.
CHAPTER 1

INTRODUCTION

1.1 Introduction

In today’s market driven economy, companies have to keep pace with the ever-changing trends by offering products that cater to the needs of the consumers. In other words, in this new era, companies are required to create the right product for the right target market (Shafiq, Raza & Rehman, 2011). Consumers are no longer the classic family; the population has now been broken into narrow focus groups such as singles, seniors and various ethnic groups (Karolefski, Heller, & Gentry, 2006). These groups of consumers have vastly different needs and wants. They are also demanding and easily switch stores if they are not satisfied with the in-store experience (Karolefski et al, 2006). Companies have to constantly keep up with the diversified market by offering more variety of products with different combinations in order to cater to consumer needs. At the same time, retailers will also need to come up with more ideas to retain these group of consumers and to ensure subsequent visits to their stores.

The increasing home brands and private brands in fast moving consumers good (FMCG) has created a more intense competitive environment in-store, hoping that the consumers can pick up their products on-shelf and purchase them. Manufacturers need to come up with strategies to attract consumers in-store to try out their new products and at the same time differentiate themselves from their competitors.
The first trial usage usually is unplanned purchase or impulse purchase, where other than the products itself, there are other factors that influence consumers’ impulse buying behavior. Research has shown that unplanned purchase is an area which could become of more interest to certain parties such as manufacturers, marketers and retailers worldwide as it is one of the factors that can increase sales volumes and improve bottom lines (Venkateswara, Prasanna, & Srinivasa, 2015).

According to Abrahams (1997), almost 80% purchases on certain product category are made impulsively in the United States. This evidence also found in various studies (Ghani & Jan, 2011; Kacen, Hess & Walker, 2012). Impulse purchase in-store is therefore an interest to manufacturers, retailers (Abratt & Goodey, 1990), brand owners or marketers due to its positive impact on sales. Accordingly, many companies spend large sums of money on advertising each year marketing its brands to consumers, hoping to increase awareness, trial usage, and ultimately market share (Abratt & Goodey, 1990).

1.2 Background of study

According to Kotler, Armstrong, Harris and Piercy (2017), consumer goods are divided into four categories, this include shopping products, where consumers will compare prices before purchasing; specialty products are goods with unique characteristics or brand identifications; unsought products are goods which is believe to be purchased frequently or immediately by the consumers and it require minimum comparison and efforts. One of the subcategory of convenience goods is called impulse goods: goods purchased without prior planning (Cahyorini & Rusfian, 2011). Convenience goods include detergents, fast foods, magazines (Kotler et. al, 2017) alcohol, cheese, chocolate, fruit, meat products, paper products, and shampoo (Manrai, Lascu, & Manrai, 1998). Convenience goods are low involvement and low risks goods (Atkins & Kim, 2012). As such, impulse purchase usually happens when there is low
involvement in the purchase decision. Convenience goods includes food and non-food everyday consumer products (Vibhuti, Tyagi & Pandey, 2014).

Based on research, most of impulse purchase studies are focusing on consumers in the United States (U.S.) (Ghani & Jan, 2011) and developed countries such as Great Britain (Bayley & Nancaaw, 1998), it is also found that consumers in the U.S. behave more impulsively than the rest of the world (Ghani & Jan, 2011). However, this may not be the case as there are not enough evidence or recent research done on this area in developing countries or collectivist culture countries (e.g. Singapore, Malaysia and Hong Kong). In the last decade, consumers have been going through a great deal of transformation in their daily lives as a result of the development of Information and Communication Technologies (“ICT”) (Weyer, Schmitt, Ohmer and Gorecky, 2015). This has enabled consumers access to internet at anytime and anywhere. Given the “eyeballs”, it is in the interest of companies to increase online advertisement. Consumers can easily spot the advertised product or service and if they like it, they can purchase it on the spot. As closing a sale is only one click away, online advertising has increased the possibility of consumers purchasing goods impulsively.

To understand the factors that will lead consumers to purchase a new product on shelf or to make the first trial usage purchase, marketers have undertaken in-depth studies on consumer’s impulsive purchase behavior. These studies are done to understand consumers’ behavior and eventually create a sustainable profitable relationship between consumers and manufacturers. In the study of Ghani and Jan (2011), it also mentioned that the marketers and researchers around the world take into consideration of the importance of impulse buying behavior and it has been studied extensively by researchers for the past 60 years. According to Muruganantham and Bhakat (2013), in India, the main drivers for retails growth are changed of lifestyles, increased of disposable income and favorable demographic segmentation that changed the buying behavior and influenced impulse purchase among consumers.
Over the years, product design is becoming more important than merely for protection during transportation or logistic purpose. Product design includes the design, structure and information of a product packaging. The rapid development of technology has transformed many retail outlets into self-service stores where the product design has become the spokesperson for the manufacturers (Estiri, Hasangholipour, Yazdani, Nejad, & Rayej, 2010). Product design plays an important role in stimulating impulsive buying behavior of the consumers in-store. In other words, product design enables the manufacturer to communicate and market their products to the consumers (Kuvykaite, Dovaliene, & Navickiene, 2009). Minimalism still plays an important role in the development of communication tools and previous study shown that the approach supports an ideology not only on ideology but also inescapable in our world today: ecology (VanEenoo, 2011). Therefore, a complex packaging design may impose a complex image of the products to the consumers. According to VanEenoo (2011), reducing a complicated design can help to reduce the complexity for the end user as well as easing of use which meant greater sales and bigger profits for the manufacturers concerned. The effect of a minimalist concept on our social behavior is crucial. As part of the product design, product information in the labels can also influence the buying behavior of consumers with high health consciousness (Grunert & Wills, 2007). This group of consumers will study the label for the contents or ingredients used in the products to ensure that they are safe to use on external application before purchasing it (Johri and Sahasakmontri, 1998).

There are a lot of in-store promotional methods which the manufacturers and retailers can adopt to promote their products (Nordfält & Lange, 2013). In Malaysia, being a cross-cultural country, it is important for the manufacturers and retailers to identify the best in-store stimuli to enhance the consumers’ buying behavior. Based on previous research, manufacturers and retailers also spend a huge amount of money to do in-store promotion to stimulate impulse purchase (Abratt & Goodey, 1990). One of the example in the study of Nelson and Ellison (2005), it mentioned that Procter & Gamble Co. spent millions on in-store promotion efforts as they believe in “first moment of truth”, which is the first three to seven seconds when a shopper notices a product on the shelf.
This is only one of the case, while there are no single studies that can provide the total amount spend per year on in-store stimuli. This information is important for the manufacturer and retailers to evaluate the effectiveness of in-store stimuli and to the extent which they influence consumer buying behavior towards their brands (Abratt & Goodey, 1990) against their total spend. The information gathered will help the manufacturers and retailers to understand the shoppers better and contribute to future strategies to stimulate additional sales and even differentiate itself from competitors.

Price conscious consumers tend to be more sensitive to the price of the products and services, and for this group of consumers, obtaining lower price on the chosen product is more important (Shukla & Banerjee, 2014). The concept of price consciousness was defined by Monroe and Petroshius (1981, p. 44), as “unwilling to pay a higher price for a product, and if the price is greater than what is acceptable to pay, the buyer may refrain from buying”. This means that this group of consumers will evaluate the value of the product against the price. If the perceived value is greater than the price, it is likely that the consumer will purchase, and vice versa, if the price is greater than the value, the consumer is unlikely to purchase. For price conscious consumers, it is very unlikely that they will purchase impulsively as they would usually do price comparison and conduct research on the products before deciding on the purchase.

1.3 Problem statement

Many studies on impulse purchase has been done on consumers in the United States. The studies show that consumers in the United States tend to be more impulsive than other countries (Kacen & Lee, 2002). This conclusion has been corroborated in various studies (e.g. Ghani & Jan, 2011). Also, most of these studies were mainly focusing on the consumer than the product itself (Kacen & Lee, 2002; Awan & Abas, 2015). In the study by Vibhuti et al. (2014), the factors affecting consumers’ buying behavior vary from product to product. Therefore, this research paper is a study of the factors that influence consumer’s impulse buying behavior attributable to packaging design, in-
store promotion and price conscious consumers in the Malaysia context focusing on non-food convenience goods.

Product design or product packaging may play an important role in attracting the consumer to purchase a non-food convenience good. It is often the first impression the consumer will have of a product before deciding to purchase it, hence, it is worthwhile to ensure that the packaging is able to communicate with the consumer to secure the sale (Ahmad, Billo & Lakhan, 2012). Therefore, the product packaging has to be unique and attractive enough to create the brand awareness and to get the message across to the consumers while it is on shelf (Cahyorini & Rusfian, 2011).

Product design or product packaging comes in various forms such as imagery, brand values, products functionality or pure innovation (Ahmad et. al, 2012). According to Raheem et al. (2014), packaging has become a sales promotional tool to stimulate consumers buying behavior. This evidence is also supported in various studies (e.g. Ahmad et. al, 2012). Although product design as a sales promotional tool is getting more important, there is still limited empirical research on this area especially in the Malaysia context for non-food convenience goods.

According to Belch and Belch (2009), the growth of sales promotion in the United States has increased dramatically over the past decades and the increase on spending on sales promotion in advertising continued into the millennium. The allocation of marketing budgets is divided among consumer promotions, trade promotions and media advertising depending on industry and company (Belch and Belch, 2009). One of the sales promotion focus by the marketers nowadays are in-store promotion. Consumers always prefer to receive some incentive in any form while purchasing their groceries in-store. Therefore, in-store promotion has always created intense competition between companies or brand owners, especially on non-food convenience goods. Retailers also play an important role on in-store promotion where they constantly need to come up with promotions to attract the consumers to visit their stores (e.g. free coupons or cash vouchers). The purpose of in-store promotion is to stimulate
the buying behavior of the consumers to encourage impulse purchase on new products on the shelf. Studies have shown that approximately 65% of purchase decisions in supermarket were made in-store and over 50% were actually unplanned purchase (Popai & Dupont, 1977, Abratt & Goodey, 1990, Dawson & Kim, 2010 and Hultén & Vanyushyn, 2014). The percentage may increase over the time due to the increase of private brands.

Price conscious consumers are sensitive to price, where this group of consumers will unlikely purchase on an impulse. According to Gauzen and Roy (2012), price is also categorized as one of the criteria in consumer decision making process where it implies the idea on the acceptable level. The presence of in-store promotion such as price reduction may affect the decision of the price conscious consumers to purchase impulsively. However, to the best knowledge of the researcher, the study that address factors influencing consumer’s impulse buying behavior in Malaysia context is still limited to date.

1.4 Research Questions

In this research, there are five questions raised:

RQ1: What is the relationship between product graphic design and consumers’ impulse purchase behavior in-store for non-food convenience goods?
RQ2: What is the relationship between product structure design and consumers’ impulse purchase behavior in-store for non-food convenience goods?
RQ3: What is the relationship between product information and consumers’ impulse purchase behavior in-store for non-food convenience goods?
RQ4: What is the relationship between in-store promotion and consumers’ impulse purchase behavior in-store for non-food convenience goods?
RQ5: What is the relationship between price conscious consumers and level of impulse purchase on non-food convenience goods?
1.5 Research Objectives

In mind of the research questions raised above, the research objectives for the present study are as follow:

General Objectives
The purpose of this study is to explore the product packaging design, in-store promotion and price consciousness consumer, and their impacts on influencing the consumers’ buying decision to purchase impulsively.

1.5.1 Specific Objectives

- To examine the influence of product graphic design on impulse purchase.
- To examine the influence of product structure design on impulse purchase.
- To examine the influence of product information on impulse purchase.
- To examine the influence of in-store promotion on impulse purchase.
- To examine the effect of price consciousness consumers on the level of impulse purchase.

1.6 Hypotheses of the Study

Hypothesis One
Ho: There is no relationship between product graphic design and impulse purchase.
H1: There is a positive relationship between product packaging graphic design and consumers’ impulse purchase behavior in-store for non-food convenience goods.

Hypothesis Two
Ho: There is no relationship between structure design and impulse purchase.
H1: There is a positive relationship between structure design and consumers’ impulse purchase behavior in-store for non-food convenience goods.

**Hypothesis Three**
Ho: There is no relationship between product information and impulse purchase.  
H1: There is a positive relationship between product information and consumers’ impulse purchase behavior in-store for non-food convenience goods.

**Hypothesis Four**
Ho: There is no relationship between in-store promotion and impulse purchase.  
H1: There is a positive relationship between in-store promotion and consumers’ impulse purchase behavior in-store for non-food convenience goods.

**Hypothesis Five**
Ho: There is no relationship between in-store promotion and impulse purchase.  
H1: There is a negative relationship between price consciousness and consumers’ impulse purchase behavior in-store for non-food convenience goods.

### 1.7 Conceptual Framework and Research Hypothesis

According to Mohan et al. (2013), impulse purchase is pertaining to a sudden urge moment where the consumers pay little thought during the purchasing of goods process. This spur of the moment action may be due to the external factors which attract them to purchase a product or service impulsively. The conceptual framework seeks to find out the relationship between the independent variables and as well the effect on the dependent variable which is the impulse purchase and using one of the independent variable to examine the change of price conscious consumers on impulsive behavior.
Table 1: Table of Study Variable

<table>
<thead>
<tr>
<th>No</th>
<th>Study Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Packaging Design Variable</strong></td>
</tr>
<tr>
<td>1</td>
<td>Graphic Design Dimension – Brand Name Sub-Dimension</td>
</tr>
<tr>
<td>2</td>
<td>Graphic Design Dimension – Colour Sub-Dimension</td>
</tr>
<tr>
<td>3</td>
<td>Graphic Design Dimension – Typography Sub-Dimension</td>
</tr>
<tr>
<td>4</td>
<td>Graphic Design Dimension – Images Sub-Dimension</td>
</tr>
<tr>
<td>5</td>
<td>Structure Design Dimension – Shape Sub-Dimension</td>
</tr>
<tr>
<td>6</td>
<td>Structure Design Dimension – Size Sub-Dimension</td>
</tr>
<tr>
<td>7</td>
<td>Structure Design Dimension – Material Sub-Dimension</td>
</tr>
<tr>
<td>8</td>
<td>Product Information Dimension</td>
</tr>
<tr>
<td></td>
<td><strong>Impulsive Buying Variable</strong></td>
</tr>
<tr>
<td>9</td>
<td>Spontaneous Urges to Buy Dimension</td>
</tr>
<tr>
<td>10</td>
<td>Power and Compulsion Dimension</td>
</tr>
<tr>
<td>11</td>
<td>Excitement Dimension</td>
</tr>
<tr>
<td>12</td>
<td>Synchronicity Dimension</td>
</tr>
<tr>
<td>13</td>
<td>Product Animation Dimension</td>
</tr>
<tr>
<td>14</td>
<td>Hedonic Elements Dimension</td>
</tr>
<tr>
<td>15</td>
<td>Conflict Dimension</td>
</tr>
<tr>
<td>16</td>
<td>Disregard for Consequences Dimension</td>
</tr>
</tbody>
</table>

Source: Table of Study Variable from previous study by Cahyorini and Rusfian (2011).

The above table are proposed study variable by Cahyorini and Rusfian (2011) which
proposed a valid and reliable measurement instrument applicable to convenience goods. There is another research by Shukla and Banerjee (2014) that explores store level promotion, brand equity and price consciousness with impulse purchase.

Based on previous studies which had the similar dependent variable – impulse purchase, the present study proposed to add in the construct: in-store promotion and price consciousness into the study variable based on research by Cahyorini and Rusfian (2014) that study on packaging design and impulse purchase. There are two independent variables added to the study: in-store promotion in terms of price promotion has significant effect to reduce the search intentions of a certain product and create buying intention (Alford & Biswas, 2002); price consciousness consumers have significant negative impact on buying intention without intensive search of a product despite a good deal (Alford & Biswas, 2002). In addition, demographic factors have proven by previous studies of Ekeng, Lifu and Asinya (2012) and Awan & Abbas (2015) have influence on the impulse purchase of the consumers.

Figure 1: Proposed Conceptual Framework of Packaging Design, In-Store Promotion and Price Influence Consumers’ Impulse Buying Behavior In-Store

Source: Developed for research
**H1:** Product graphic design will have a significant positive impact on impulse purchase behavior for non-food convenience goods

**H2:** Product structure design will have a significant positive impact on impulse purchase behavior for non-food convenience goods

**H3:** Product information will have a significant positive impact on impulse purchase behavior for non-food convenience goods

**H4:** In-store promotion will have a significant positive impact on impulse purchase behavior for non-food convenience goods

**H5:** Price consciousness will have a significant negative impact on impulse purchase behavior for non-food convenience goods

### 1.8 Significant of Studies

In the previous studies of Silayoi and Speece (2004), it was confirmed that the packaging design, level of involvement and time pressure had significant effect on the purchase intention. However, it was only conducted through focus group consist of 12 participants in Thailand. It is not enough to represent the whole population. The study of Abratt and Goodey (1990) found that the impulse purchase rates were consistently associated with in-store promotion in the 15 supermarkets in South Africa for convenience goods. While in the study of Cox (1970), the researcher found positive but nonsignificant relationship between in-store promotion and impulse purchase on food product in United States. Price consciousness is a nonsignificant predictor of impulse purchase depending on the nature of the products (e.g. electronic goods compare to fast moving consumer goods) (Shukla & Banerjee, 2014).

This research paper aims to close the information gaps of marketers, retailers and manufacturers and to address the following points. Firstly, for marketers to understand further whether product design will have an effect on consumers impulse purchase behavior on non-food convenience goods. Secondly, to improve the knowledge of marketers, retailers and manufacturers on the pull factors with in-store promotion that
will drive the trial usage of new products and increase the sales of convenience goods in the Malaysia context. Lastly, to determine of price conscious consumers will have a negative impact on impulse buying behavior and with the help of in-store promotion will increase the impulsive buying behavior of this group on convenience goods.

1.9 Limitation of the Study

The limitation to conduct this study included the limitation of location. The present study is conducted within Greater KL area where the highest average household income in Malaysia. The purpose of this study is to explore consumers’ impulse purchase behavior towards packaging design, in-store promotion and price consciousness. However, the data will be collected from respondents who are staying in Greater KL area only. The collected data may not be able to represent the residents in rural area or other states in Malaysia.

Besides that, there is limitation of respondents to provide the accurate or impartial response when answering the questionnaire. This is due to the combined of positive-keyed and negative-keyed questions in the same variables may be confusing to the respondents. Respondents may make a mistake on agreeing or disagreeing both positive-keyed and negative-keyed questions when filling up the survey. Also, only survey is unable to provide in-depth findings. Therefore, they will provide inaccurate reply which will cause inaccurate result for this study.

Another limitation identified in this study is the focus on non-food convenience goods in groceries stores such as convenience store, supermarket, hypermarket, pharmacy, and mini market. Most studies on product packaging design are done on food related products (e.g. Silayoi & Speece, 2004). Although the basic foodstuffs comprise of many generic products (e.g. eggs, meat, fish, cheese, vegetables, flour, sugar and milk), they generally have high frequency of purchase but tend to have relatively low
unplanned purchase percentage (Kollat and Willett, 1967). This evidence is also found in other studies (Abratt and Goodey, 1990).

1.10 Delimitation of the Study

The delimitation of this study is target location to conduct this research study. In this research project, researcher is able to reach out to the respondents in Greater KL with limited barriers on distributing the survey questionnaire. The targeted sample size for the study will be 300 respondents. Based on Saunders, Lewis and Thornhill (2012), sample size of 300 is sufficient to justify the whole population. In this research, the researcher is using snowballing method which distributes the research questionnaire to friends and colleagues. Friends and colleagues will help to distribute the questionnaires to their friends and family as well. The snowballing method enables the data to be collected in short period. The data was collected from 4 March 2018 to 21 March 2018, shorter than the targeted time frame. A pilot test has been conducted prior to the obtain feedback from the respondents to check whether there are any unclear questions which require to be rectified before the actual survey is being conducted. In order for the research project to be completed on time, the grocery products have been narrowed down to non-food convenience goods to be more specified.

1.11 Chapter Layout

Chapter 1: Introduction

This chapter is preliminary chapter that presents an outline of impulse purchase. It outlined the research objectives, questions and hypotheses. The significance of the study and overall chapter layout of the research are presented.

Chapter 2: Literature Review
In chapter two, it consists of a comprehensive review of earlier research that will serve as the foundation on the theoretical framework for the current investigation can be built and the hypotheses developed and the conclusion of chapter two.

**Chapter 3: Methodology**
Chapter three discussed on the research paradigm, data collection method, construct measurement, data processing and data analysis.

**Chapter 4: Research results and findings**
In chapter four, the data result will be presented after using the SPSS version 20 to analyze the test.

**Chapter 5: Discussions and Conclusions**
The last chapter presents a research report after the data was analyzed and the results were interpreted. The major findings, implication, limitation of study and recommendations for future research will be summarized.

### 1.12 Conclusion

In this chapter, the definition of the problem is narrow down from its original broad base. The problems will definitely be identified and defined while the research questions and research objectives will encompass us to an idealistic state. The significance of the study outlines will be sufficient to have scope for improvement on the retail strategy use by manufacturers, marketers and retailers. The next chapter will discuss the past studies and identified the potential hypothesis and proposal of theoretical framework that is adopted and adapted for this study.
Chapter 2
LITERATURE REVIEW

2.1 Introduction

This chapter is the literature review, conceptual framework and development of hypotheses of the study. The contexts of the study include impulse purchase, in-store promotion, store environment, visual packaging design and price consciousness will be reviewed in this chapter. Further, hypotheses will be developed to further test the relationship of each context with impulse purchase.

2.1.1 Impulse purchase

According to Venkateswara, Prasanna, & Srinivasa (2015), researchers and marketers around the world felt the need to study impulse purchase and this has been going on for the past six decades. In the earlier days, researchers defined impulse purchase as an unplanned behavior which involved fast decision-making and tendency to possess the product immediately (Rook & Gardner, 1993). On the other hand, Iyer (1989), explained that all impulse purchase can be unplanned purchase, but not all unplanned purchase is impulse purchase. This finding is also confirmed in various studies (Jones, Weun, Reynolds & Beatty, 2003; Hadjali, Salimi, Nazari & Ardestani, 2012). Unplanned purchase can also happen when the consumers forget to include an item in their shopping list, but upon seeing the product on-shelf, they are reminded of the need to purchase it. While impulse purchase is unintentional where the consumers does not
search for the item and has no plan to purchase the item (Hadjali et al., 2012). According to Iyer (1989), impulse purchase also included the consumers strong sense and sudden urge to possess which leads to purchase of the products.

In the study of Bhakat and Muruganatham (2013), on early years, researchers have not taken into consideration the personal traits of the consumers as part of the influencing factors. Only in the later years that researchers have started to include personal behavioral aspects (Bhakat et al., 2013) and other external factors influencing impulse purchase such as product packaging (Silayoi & Speece, 2004), in-store promotion (Phillips, Parsons, Wilkinson & Ballantine, 2015) and price consciousness (Kukar-Kinney, Ridgway & Monroe, 2012). The study of Ekeng et al. (2012), shows that there is significant relationship between demographic (e.g. gender, age, income and education) and impulse purchase. There is also proven in other studies (Awan & Abbas, 2015).

Over the past two decades, shopping has become one of the key activities for consumers to enhance their lifestyle activities and promote their social status (Bayley and Nancarrow, 1998). Shopping has increase consumers’ exposure to a wide variety of products (Bayley and Nancarrow, 1998) and in a previous research showed that consumers are opened up to different form of stimuli and contexts (Hultén & Vanyushyn, 2011). This is particularly so when shopping is easier nowadays with accessibility to good shopping malls. For instance, there are over 550 shopping malls recorded in Malaysia on 2015 (Persatuan Pengurusan Kompleks Malaysia, 2018). There are mostly located in Klang Valley from mega to strata-titled shopping malls to neighborhood malls (Lee, 2016).

Beside bricks and mortars shops, e-commerce has transformed from a trendy emerging shopping to a mainstream shopping (Wan, Nakayama and Sutcliffe, 2010) where it has motivated a rapid growth in online trading, beyond country borders (Wu, 2013). E-platform with its prompting promotion on daily basis allowing the consumer to make decision on the spot and believe to have influence on impulse purchase. In the study of
Liu, Li, and Hu (2013), the researched resulted that consumers required the website to be user friendly, visual appeal and product availability are important cues online for engendering impulse purchase. The increased usage of the Internet globally has emerged to become one of the most interactive tools that can influence the decision of consumers to shop online (Lim and Cham, 2015). Consumers have started to purchase online more often due to the convenience of the internet, they can even purchase products and services overseas without being presence in that country. By having the Hyper Text Transfer Protocol Secure (HTTPS) which help to encrypt the information transferred online has eventually increase the confidence level of the consumer and reduce the risk of monetary transaction through internet.

2.1.2 Packaging Design

There are increasing studies on the effect of product design influencing consumers buying behavior (Silayoi & Speece, 2004). The role of the product design is no longer playing the functional or logistic role, but it also plays an important role in marketing and communication to the consumers (Silayoi & Speece, 2004). According to Raheem, Vishnu and Ahmed (2014), packaging is also seen as one of the sales promotional tool for the organizations. Packaging design includes quality, color, wrapper (Raheem et al., 2014), form, size, graphics, flavor (Kuvykaite, Dovaliene and Navickiene, 2009), material, text and brand (Kotler, 2003).

Packaging design is turning into an exclusive tool in marketing a product and marketers believe it provides better result than advertisement or any other tools (Gelici-Zeko, Lutters, Klooster & Weijzen, 2012) when it comes to in-store display. Therefore, marketers spend a lot of money a year to redesign and rebrand their products in order to continue to capture the demanding market. This is because they believe that consumer’s buying behavior is stimulated by the packaging design itself (Raheem et al., 2014). The role of packaging has now changed from an informative carrier to a marketing communications carrier where it is used to attract the consumers attention.
and transmit value of product at the point of sale (Kuvykaite et al., 2009). According to Raheem et al. (2014), a product that is well-labeled will tend to entice the consumers to buy more. However, this may subject to the usage of the product as well whether it is perishable goods, non-perishable goods or fast-moving consumer goods.

Over the years, many researchers have reviewed product design and its influence on consumer impulse purchase behavior (Cahyorini & Rusfian, 2011). There are various studies done on packaging by splitting it into two different elements during their studies. Vila & Ampuero (2007), classified packaging elements into graphic elements (color, typography, shapes used and images) and structural elements (form, size of containers and materials). These evidences are also shown in Underwood (2003) study. Silayoi and Speece (2004), highlighted the four-main elements that potentially affecting the consumer decision making can be categorized into two categories: visual and informational. However, the studies were mainly focused on visual element but not verbal elements. Other studies, researchers found that there is a need to focus on both non-verbal cues (e.g. visual appeal, graphic, pictures, etc.) and verbal cues (e.g. brand slogan, logo, product name, etc.) of packaging elements, these can be found in the studies of Rettie & Brewer (2000), Butkevičienė, Stravinskienė & Rūtelionė (2008) and Keller (2003).

Impulse purchase usually happens when there is low involvement in the purchase decision. It means that the consumer has limited time to evaluate the product or brands before purchasing the product (Butkevičienė et al., 2008). Referring to Belch and Belch (2009), low involvement occurs when consumers do not compare their needs, beliefs and experiences during the buying process. In the study of Silayoi and Speece (2004), mentioned that most of FMCG products are considered as low involvement products. Therefore, product design of the FMCG products are important to capture the attention of the consumers to enter into impulse purchase.

In the millennial era, consumers take features, benefits, product quality and brand image as a norm for the product they purchase (Schmitt, 2011). Their requirements for
a product have now switched to communication and marketing campaign which can improve their lifestyle (Schmitt, 2011). With this the marketing researchers have created imaginative methodologies where these experiential marketing used pictures, photographic, story-telling and other methods to get the consumers to share their experience (Schmitt, 2011). Experiential marketing is greatly related to product and the packaging design where the graphic, structure and product information can capture the attention of the potential buyer. However, there are limited studies done on experiential marketing where the influence of packaging on the consumer’s experience expectations (Rebollar, Lidón, Serrano, Martín, & Fernández, 2012) towards impulse purchase. Nonetheless, by reviewing the advertising for consumer-packaged goods, marketers and manufacturers now focus more on the experience expectations that the user will have upon using the product than to sensory expectation (Rebollar, et al., 2012). The added value of an advertised product is the experience it is capable of transmitting (Rebollar, et al., 2012).

The packaging design in this study has three elements where we will look into the details of each elements. They are graphic design (brand name, color, typography and image), structure design (size, shape and materials) and product information.

### 2.1.2.1 Graphic Design

There were many studies done on graphic design through experimental research where the researcher will use the graphic design element to test respondent’s response. This can be found in the study from Qing, Kai, Zhang, & Chen (2012). These researches are usually done on food and beverages. For instance, in the study of Auttarapong (2012), the researcher created the graphic design element on the wine product labels and used them to strengthen the image of a product to make it look more appealing on shelf through the text layout, images, color and size. It is used to enhance the visual perception of the consumers toward the product. Besides, it is also important as it represents the quality of the products. According to Qing et al. (2012), a good graphic
design of a product needs to be able to ensure the combination of the graphic elements that are able to express the purpose of the product in order to create the buying desire of the consumers. Their study also highlighted that the text used on the packaging is not only to convey messages to the consumers but also for attracting attention i.e. for the product to be noticed on shelf. This evidence is also found in another study by Cahyorini & Rusfian (2011) in another food packaging.

The choice of color of the product is actually the first step that needs to be considered as it can easily affect consumers emotionally (Qing et al., 2012). In the study by Gopal and George (2014), color has been classified as “catchy element” in graphic design, as it can catch the attention of the consumers easily. Different consumers will have different feelings against different color (Qing et al., 2012), therefore, it is important to be mindful on choosing the color by taking into consideration the impact of it towards the consumers (Gopal & George, 2014). In the study of Cahyorini & Rusfian (2011) also found that the color of the product packaging is easy to remember and able to draw the consumers into purchasing the product. The colors have to be visible with brighter colors on the shelves if the product was to survive a competitive self-promoting environment (Cahyorini & Rusfian, 2011).

The product picture may appear to be an important piece of information during the purchase decision when the consumer has low to no knowledge of the product (Underwood, Klien & Burke, 2001). According to Underwood et. al (2001), a picture on the product packaging may represent the quality of an inexpensive private label product compare to a national brand and their study has proven that there is significant effect on pictures towards low familiarity products. In another word, the picture on the product may influence the consumers to purchase impulsively on products that the consumers may not aware of. Previous study also shown that suitable and vivid picture or bright packaging color can deliver a happy feeling, or an easy handling packaging are elements that can attract the consumer’s attention (Raheem, Vishnu and Ahmed, 2014). The products on shelf will only have a slight moment to catch the attention of the consumers in-store, therefore, the packaging design will need to be eye-catching.
2.1.2.2 Structure Design

In structure design, this is the area where the size, shape, form, display surface (Qing et al., 2012) and materials of the product are being determined (Cahyorini & Rusfian, 2011). It is the visual appearance of the product on shelf. The quality judgement of the product is based on the product characteristic of the packages itself throughout the decision-making processes (Estiri et al., 2010). There a number of considerations when come to structure design of a non-food convenience goods product such as functional design, easy to hold, easy to store and flexibility of the product form to accommodate the content (Gopal & George, 2014).

Most studies were carried out on food products rather than non-food convenience goods. In one of the study from Silayoi and Speece (2004), the researchers mentioned that the size, shape, and length of the packages will affect the consumers’ judgments and decisions. The consumers usually use these elements to make volume judgments (Silayoi & Speece, 2004). This was confirmed in another study by Raghubir & Krishna, (1999), where consumer perceive higher volume on longer or bigger packaging than the true volume and the consumer will not change their perception in a short period of time. Packaging size of the product is also one of the element where the consumer considered when purchasing the products (Draskovic, 2010). The size of the packaging determines the convenience of the packaging in terms of storage and handling. Smaller packaging size is prone to be child friendly and convenience while larger pack size is meant for larger family (Draskovic, 2010).

On the other hand, packaging convenience is related to the packaging materials of the products which are also important to consumers (Draskovic, 2010). The researcher found that plastic, PET and carton packaging are considered the most convenient packaging materials where glass is least convenient (Draskovic, 2010). The study also revealed that consumers preferred resealable packaging which allow them to reseal the product with larger pack size (Draskovic, 2010).
2.1.2.3 Product Information

Product packaging is used as the communication bridge between the consumers and the manufacturers. It allows the manufacturers to communicate with their consumers. There is limited empirical study done on product information for non-food products that will affect consumers’ impulse purchase behavior. Product information on products is one of the critical factors on the decision-making process, therefore, the package design need to be favorable to the consumers (Estri et al., 2010). This evidence is also shown in various studies (Silayoi and Speece, 2004). In the previous study, consumer’s experience with organic products has significant relationship with purchase intention for organic personal care products (Yeon Kim and Chung, 2011). Hence, the information on the product is important for the consumers to learn about the product.

In the study of Becker, Maiman, Kirsch, Haefner, and Drachman (1977), health consciousness consumer tends to engage in healthy behaviors. This evidence is also shown in various studies (Yeon Kim & Chung, 2011). The consumers with high health conscious care about the desired state of well-being will definitely put extra efforts to maintain a healthy life (Newsom, McFarland, Kaplan, Huguet, & Zani, 2005). In the context of non-food convenience goods purchases, consumers with high health consciousness may consider whether a product is safe to skin and body; therefore, they may be more concerned with the types of ingredients used to make the product (Johri and Sahasakmontri, 1998). With this, the information elements of a product are getting more important for the consumers, this especially for the health-conscious group of consumers as they pay more attention on the label’s information (Estri et al., 2010). The product labels enabled the consumers to read about the content of the products pre-purchase.

During the in-store buying decision process, the package itself is the main source that will provide information of the product to the consumers (Butkevičienė et al., 2008). At this stage, the information on the labels will communicate comprehensively with the
consumers about the content and function of the products, which will then determine unplanned need in case of impulse purchase (Butkevičienė et al., 2008).

2.1.3 In-store promotion

Based on Phillips, Parsons, Wilkinson and Ballantine (2015), in-store promotions in a supermarket or hypermarket can be categorized into three. First is in-store demonstration, where it can be a demonstration of products (e.g. cooking demonstration), trial of a product usually on food product for free tasting, or combination of both. In-store demonstration is a frequently used promotional tool to get the consumers to try on new products (Nordfält & Lange, 2013). In Malaysia, the in-store demonstration is often used on almost every weekend in the supermarket. It is believed to be one of the most effective ways to promote a new product due to the increase of crowd visiting local supermarkets for groceries. Besides promoting new products, in-store demonstration also helps to get products that suffer from not being noticed by consumers to get noticed (Sorensen, 2009). Moreover, there will be a sales person’s involvement to perform the demonstration in-store in a visible spot. This will ensure the products are being noticed whenever a consumer passes by (Phillips et al., 2015).

Second in-store promotion is the end-of-aisle display (Phillips et al., 2015). Brand owners and supermarkets consider end-of-aisle display as a highly visible display area to get the products to be noticed by the consumers (Suher and Sorensen, 2010). The end-of-aisle is also one of the fixed in-store promotion spaces where it has been regarded as the prime real-estate in a supermarket (Phillips et al., 2015). It is the space where manufacturers will want to place their new products to get attention from the consumers. Similar to in-store demonstration, it may not only be for new products. Further, consumers usually will expect products display on end-of-aisle to come with price-off promotions.
Third in-store promotion that generates a lot of researchers’ interest is coupons (Barat & Ye, 2012). Coupons work as redeemable vouchers used for price reduction (Phillips et al., 2015). According to a study, 77% of the population in the US use coupons and save more than US$ 3 billion in 2012 (Barat et al., 2012). Based on another study, coupons are often used by both manufacturers and retailers to increase sales rather than giving price discounts (Phillips et al., 2015). In Malaysia, coupons usually work together with a loyalty card, e.g. the AEON Card allows consumers to collect points and exchange them for cash coupons. Other than the in-store promotion mentioned, different research studies also include in-store siting, on-shelf positions, and point-of-purchase (Abratt & Goodey, 1990).

2.1.4 Price Consciousness

Price consciousness can be defined as the buyer’s constant emphasize on purchasing products and services at a low price (Lichtenstein, Bloch & Black 1988). This evidence is also supported in various studies (e.g. Lichtenstein, Ridgway, & Netemeyer 1993; Kukar-Kinney et al., 2012; Shukla & Banerjee, 2014). Price conscious consumers are also sensitive to the change of the price of the selected products and services (Lichtenstein et al., 1988). This type of consumers will perceive the quality of the products and services purchase higher than the price paid (Lichtenstein et al., 1988).

On the other hand, a consumer who is price conscious will perceive that obtaining a lower price on a chosen product is far more important than for non-price conscious consumers (Kukar-Kinney et al., 2012). Previous research has shown that price conscious consumers will perform a price comparison before they make the final decision, including the last price related transaction (Sinha & Batra, 1999; Alford & Biswas, 2002; Kukar-Kinney et al., 2012). Price conscious consumers will usually do extensive research on the information on the products or services prior to purchase. As such, they already know the price much earlier before visiting the store.
In the study of Campbell, DiPietro and Remar (2014), visually the price cues are the same for all consumers but the interpretation of each individual will be different. For example, if two consumers saw the price for a bottle of 500ml shampoo of Brand A cost MYR15.00, one may interpret it as good quality and affordable pricing while another will think that it is more expensive than the final value they will get from the product. There are variety of factors where a consumer can finally reach an objective price and these factors include their past experiences, memory, socio-economic and demographic characteristics.

2.2 Theoretical Framework

2.2.1 Proposed Conceptual Framework

The hypothesized model of impulse purchase is proposed as in Figure 2. The conceptual framework is to further study the relationship of all variables.

Figure 2: Proposed Conceptual Framework

Source: Developed for research
These factors are identified from extensive review of the literature with indication that they are related to impulse purchase for FMCG goods in-store. The influencing factors in this study are in-store promotion, physical store environment, visual packaging design and price consciousness.

2.3 Hypotheses development

2.3.1 Product graphic design influence impulse purchase

The increase on in-store products’ competition at the point-of-sale location have eventually made the manufacturers pay extra attention on the product graphic design in order to add product value and form brand preferences (Wang, 2013). In order to catch the consumers’ attention on the first sight, the products need to be well packaged where it should appeal to the consumers (Lifu, 2012). The graphic design of the product such as font size and type, color and images will be the first to attract the attention of the consumers on-shelf. Based on the preceding discussion, the following hypothesis is developed.

\[ H1: \text{Product graphic design will have a significant positive impact on impulse purchase behavior.} \]

2.3.2 Product structure design influence impulse purchase

Lifu’s (2012) study mentioned that a good packaging can help to attract consumers and may even help to reduce advertising cost. It has been pointed out by Dawson & Kim (2010) that 50% of mall shoppers actually perform impulse purchase. Therefore, the appearance of a product is very important to create a great first impression impact during point-of-sale. There are a lot of factors that influence the design of a package,
in this study, we will be looking at the shape, size and materials used on FMCG products. With this, the below hypothesis is developed.

\textit{H2: Product structure design will have a significant positive impact on impulse purchase behavior.}

\textbf{2.3.3 Product information influence impulse purchase}

In a product packaging, the consumers can find a lot of information and details of a product and all this information will influence them to purchase the product (Gopal & George, 2014). This information includes the manufacture date, expiry date, the ingredients, origin of the product, the manufacturer (Gopal & George, 2014). In the low involvement products, product information does play a very important role as consumers have lesser time to make the purchase decision. It is usually taken place at the selling place (Butkevičienė et al., 2008). For high involvement product, consumers usually do a lot of research for the product information before purchase, however, it may be different for low involvement product when there is limited time and information require for the consumer to purchase. Based on the preceding discussion, the following hypothesis is developed.

\textit{H3: Product information will have a significant positive impact on impulse purchase behavior.}

\textbf{2.3.4 In-store promotion influence impulse purchase}

In-store promotion is a technique where store retailers, manufacturers or marketers use to attract the consumers and increase impulse purchase (Zhou & Wong, 2013). An earlier study by Abratt et al. (1990) did point out that manufacturers and retailers spent a large sum of money yearly on in-store promotion. However, in the findings of Kacen
and Lee (2002) study, Malaysia is one of the countries with collectivist culture and people in this sort of culture will be less involved in impulse purchase. There were only 160 Malaysian students who participated in their study which is not a good sample size to justify the whole population in Malaysia. Moreover, students will tend to have lesser buying power in the past. Malaysia is a country with diverse cultures consisting of different religious, and to the best knowledge of the researchers, there are limited studies on in-store promotion that increase impulse purchase behavior of the consumers. Based on the preceding discussion, the following hypothesis is developed.

**H4:** In-store promotion will have a significant positive impact on impulse purchase behavior.

### 2.3.5 Price consciousness influence impulse purchase

In previous studies, consumers with price consciousness are unlikely to purchase impulsively as they are sensitive to the price the store is offering (Lichtenstein et al., 1988). The price conscious consumers will have a few reference points check on the price for the products they would like to buy to compare the pricing (Sinha & Batra, 1999; Alford & Biswas, 2002; Kukar-Kinney et al., 2012). The price conscious consumer group is expected to put in more effort in the buying process compared to the non-price sensitive group, which will result in lower levels of impulse purchase behavior (Shukla et al., 2014). Thus, the following hypothesis is developed.

**H5:** Price consciousness will have a significant negative impact on impulse purchase behavior.
2.4 Conclusion

Previous studies on impulse buying had always focused on consumers in the United States and the research found that consumers in the U.S. tend to be more impulsive than other countries (Kacen & Lee, 2002). This behavior has also been proven in various studies (e.g. Ghani & Jan, 2011). Hence, this research is a study of the factors that influence consumer’s impulse buying behavior towards in-store promotion, store environment, visual packaging design and price conscious consumers in the Malaysia context.
CHAPTER 3
RESEARCH METHODOLOGY

3.1 Introduction

In this chapter, the focus is on the detailed methodology used to collect the needed data in order to test the hypotheses developed in the previous chapter. In this research study, the researcher applied the research “onion” introduced by Saunders et al., (2012) to explain the steps use on developing the design of the research which include the research paradigm, approach, strategy used, method, time horizon and sampling method. Further on this chapter, it has outlined in detail the data collection method, variables and measurement adopted for the study, data scale of measurement used to process the data collected, raw data processing method and analysis techniques. The researcher will also layout the limitation of the study and ethical consideration taken into the study.

3.1.1 Research Paradigm

The research paradigm chosen for this study will be positivism as the data collected will be based on observable reality while searching for consistency and connecting relationships in the data collected (Gill and Johnson, 2010; Saunders et al., 2012). This is due to the data collected based on phenomena will lead to the generation of credible data for the study (Saunders et al., 2012). Existing theory will be used to generate hypotheses for the studies.
3.1.2 Approach

On this stage, deductive approach will be used in this study because the hypotheses were developed based on the review of academic literatures (Saunders et al., 2012) and tested. Deductive approach was chosen because this study involves the development of a theory which subject to go through a series of test on the hypotheses developed (Saunders et al., 2012).

3.1.3 Strategy

In this research, the data will be collected through survey using self-administered questionnaires. This is because surveys allow the researchers to collect standardized data from a large population in an economical method, and the result is easier to compare and interpret (Saunders et al., 2012). Questionnaire survey offer standardization as all respondents are requested to answer the same questions and are exposed to the same response option for each question (Burn & Bush, 2014). It has been selected as the world commonly used strategy to collect the primary data, because questionnaire survey is easy to control, understand and transform into statistical information.

3.1.4 Method

Mono method quantitative has been chosen for this study to collect the data. Quantitative method was selected for this study as the study is associated with positivism and it will be in the form of structured questionnaires (Saunders et al., 2012). The measurement of the study will be adapted from existing studies for customization and questionnaires generation for this research. This method is chosen to measure the variable that would affect impulse purchase behavior of non-food convenience goods.
3.1.5 Time Horizon

This study will be adopting cross sectional to study the hypotheses developed at this particular time frame (Saunders et al., 2012). Due to the time constraint, cross sectional was the best option for the study. Also, it suits to our research strategy of using survey in the study to collect data. As the study is on consumers behavior for impulse purchase, we understand that consumers are getting more demanding each day, therefore, the data collected can only represent this particular period of time. The targeted timeline to complete the data collection is 1 month. The survey is carried out from 4 March 2018 to 21 March 2018.

3.1.6 Sampling method

The sampling method will be convenience sampling and snowball sampling based on non-probability sampling. As the study is to test the hypotheses developed in the context of Malaysian consumers in-store on non-food convenience goods. Therefore, the target population of this study will be consumers that visit to the grocery store (convenience stores, hypermarket/supermarket, mini market and pharmacy) at least once a week. The sampling location is within Greater KL. The questionnaire will be distributed to the respondents in Greater KL through online Google Form. Greater KL was chosen because of the three states with mean of highest monthly average household consumption expenditure were recorded under this area in 2016 (Department of Statistics, Malaysia, 2017). Referring to Table 2 below, Wilayah Persekutuan Putrajaya (W.P. Putrajaya) is RM6,971; Wilayah Persekutuan Kuala Lumpur (W.P. Kuala Lumpur) is RM6,214 and Selangor is RM5,183.

According to Saunder et al. (2012), sample size of 300 can be used to represent the whole population. The targeted sample size in this study will be 400 to prevent the failure of achieving targeted sampling size due to missing data or outliers. The identity of the respondents will remain anonymous to easily generate large amount of data for
analysis for the study. There were 437 respondents’ response to the survey through the snowballing sampling.

Table 2: Mean Monthly Household Consumption Expenditure by State

<table>
<thead>
<tr>
<th>States</th>
<th>Mean of highest monthly household consumption expenditure (MYR)</th>
</tr>
</thead>
<tbody>
<tr>
<td>W.P. Putrajaya</td>
<td>6,971</td>
</tr>
<tr>
<td>W.P Kuala Lumpur</td>
<td>6,214</td>
</tr>
<tr>
<td>Selangor</td>
<td>5,183</td>
</tr>
<tr>
<td>Malacca</td>
<td>4,374</td>
</tr>
<tr>
<td>Penang</td>
<td>4,190</td>
</tr>
<tr>
<td>Johor</td>
<td>4,148</td>
</tr>
<tr>
<td>W.P. Labuan</td>
<td>4,069</td>
</tr>
<tr>
<td>Other states</td>
<td>Below 4,033</td>
</tr>
</tbody>
</table>

Source: Department of Statistics, Malaysia, 2017

3.2 Data Collection Method

The most important aspect in every research is data collection. According to Zikmund (2012), the process of gathering data from selected sample or respondent will start when the research design has been established. Any inaccurate data collected will lead to invalid results. Therefore, it is vital for the researcher to decide the type of data to be used for the research. Primary data collection method is adopted for this research. The primary data will be collected through survey questionnaire online. The collected data will proceed to statistical testing and analyzing after receive from the respondents. The
main purpose of data collection is to examine the hypotheses that have advanced from the literatures and past studies.

### 3.2.1 Primary Data

A survey will be designed to obtain consumers feedback on the effects of factors influencing impulse purchase in-store in supermarket located in Greater Kuala Lumpur (Greater KL). This region consists of ten neighboring municipalities, governed by local communities, they are DB Kuala Lumpur (DBKL), MP Klang, MP Kajang, MP Subang Jaya, MB Petaling Jaya, MP Selayang, MB Shah Alam, MP Ampang Jaya, Perbadanan Putrajaya, and MD Sepang (“Greater Kuala Lumpur & Klang Valley,” 2012). There are approximately six million people populated in Greater KL and Klang Valley (“Greater Kuala Lumpur & Klang Valley,” 2012). The household spending is expected to reach US$281 billion in 2018 (PricewaterhouseCoopers, 2015). The survey will be collected through online forms from the respondents. The survey will also be translated into two commonly used languages in Malaysia, English and Malay in order to facilitate better understanding among respondents.

### 3.2.2 Pilot Test / Validity Test

As an initial stage, a pilot study will be conducted to improve the questionnaire so that respondents will have no issue on answering the question and there will be no issue for researcher to record the data. The sample respondents are possible as small as 10 to 20 in size for simple experimental research (Roscoe, 1975). According to Zikmund (2012), pilot testing is any small scale exploratory research study techniques that use sampling but does not apply exact standards. The pilot test of questionnaire need to be conducted before the actual survey took place. In another word, pilot test is also known as a trial test before commence to data collection stage. The test is conducted in order to identify weakness in design and instrumentation, and to provide a proxy data for selection of a
probability sample (Cooper & Schindler, 2014). If weaknesses are found during the pilot test on the questionnaire survey, the questionnaire amendment will be done by researcher to avoid the confusion during the actual data collection. By conducting the pilot study, it also enables researcher to obtain the measurement of the questions’ validity and reliability of the data collected.

Reliability measure is a measurement use to measure respondents responded in the same or in a very similar manner to an identical or near-identical question (Burns & Bush, 2014). If it is repeated application results in consistent scores and concerned with the consistency of the research findings, this can be considered reliable (Malhotra, 2009). According to the Sekaran and Bougie (2016), the reliability which less than 0.6 are consider poor, reliability test value that is in the range of 0.7 is consider good acceptable reliability, those more than 0.8 to 0.9 is considered good and the closer the Cronbach’s Alpha to 1 the higher the internal consistency. The evaluation of the Cronbach’s Alpha coefficient is based on the rules of the thumb below:

<table>
<thead>
<tr>
<th>Alpha Coefficient Range</th>
<th>Strength of Association</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 0.6</td>
<td>Poor</td>
</tr>
<tr>
<td>0.6 to &lt; 0.7</td>
<td>Moderate</td>
</tr>
<tr>
<td>0.7 to &lt; 0.8</td>
<td>Good</td>
</tr>
<tr>
<td>0.8 to &lt; 0.9</td>
<td>Very Good</td>
</tr>
<tr>
<td>0.9 and above</td>
<td>Excellent</td>
</tr>
</tbody>
</table>

Source: Developed for research

In this study, total of 29 questionnaires distributed were collected back from the respondents on the spot. The researcher ran a reliability test on the data collected using Cronbach’s Alpha Coefficient to check their reliability and consistency. The data collected during pilot test will not be used in the main study.
3.3 Variables and Measurement

In this study, all measures will be adapted from previous research studies. Each variable will come with own measurement items. In this case, there will be four independent variables and one dependent variable. They are in-store promotion, store environment, visual packaging design, price consciousness and impulse purchase.

The below will be the sample of measurement for all variables:

Table 4: Impulse purchase construct and measurement items

<table>
<thead>
<tr>
<th>Construct</th>
<th>Sample of measurement items</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impulse purchase</td>
<td>1. Even I see something I really like, I do not buy it unless it is a planned purchase.</td>
<td>Bruton, Lichtenstein, Netemeyer, Garretson (1998)</td>
</tr>
<tr>
<td>9 items</td>
<td>2. When I go shopping, I buy things I had not intended to purchase.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. I avoid buying things that are not on my shopping list.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. It is fun to buy spontaneously.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. I do not buy until I am sure I am getting a real bargain.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>6. For me buying grocery items is a spontaneous occurrence.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7. For me buying grocery items can come “out of the blue”.</td>
<td></td>
</tr>
</tbody>
</table>
8. Generally speaking, I can consider myself to be an impulsive shopper.

9. When it comes to making grocery purchases, I usually purchase on an impulse.

Table 4 above indicates impulse purchase is measured by 9 items adopted from Bruton et al. (1998). The scale evaluated the consumers’ impulse purchase behavior through these positive-keyed and negative-keyed items.

**Table 5: Packaging design construct and measurement items**

<table>
<thead>
<tr>
<th>Construct</th>
<th>Sample of measurement items</th>
</tr>
</thead>
<tbody>
<tr>
<td>I will purchase if:</td>
<td></td>
</tr>
<tr>
<td>1. Brand name of the product</td>
<td>draws my attention.</td>
</tr>
<tr>
<td>2. Brand name on packaging</td>
<td>reflects genuine origin of the manufacturer characteristics.</td>
</tr>
<tr>
<td>3. Brand name of the packaging</td>
<td>is unique compared to others</td>
</tr>
<tr>
<td>4. Brand name of the product</td>
<td>packaging is easy to remember</td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>5.</td>
<td>Packaging color composition on the product packaging draws my attention.</td>
</tr>
<tr>
<td>6.</td>
<td>Packaging color composition on the product packaging is easy to remember.</td>
</tr>
<tr>
<td>7.</td>
<td>Packaging color composition on the product packaging stands out on the shelves compared to other brands.</td>
</tr>
<tr>
<td>8.</td>
<td>Packaging color composition on the product packaging creates a good mood.</td>
</tr>
<tr>
<td>9.</td>
<td>Font for the product packaging draws attention.</td>
</tr>
<tr>
<td>10.</td>
<td>Font for the product packaging is readable from a 1-meter distance.</td>
</tr>
<tr>
<td>11.</td>
<td>Font of the variants of the product packaging is readable from a 1-meter distance.</td>
</tr>
<tr>
<td>12.</td>
<td>Font for product ingredients information of the product packaging is easy to read.</td>
</tr>
<tr>
<td>13.</td>
<td>Picture on the product packaging draws my attention.</td>
</tr>
<tr>
<td>Structure Design</td>
<td>14. Picture on the product packaging is relevant.</td>
</tr>
<tr>
<td>------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td></td>
<td>15. Picture on the product is attractive.</td>
</tr>
<tr>
<td></td>
<td>16. Picture on the product packaging reflects genuine origin of the manufacturer characteristics.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>1. Packaging shape of the product draws my attention.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2. Packaging of the product makes it easy to store.</td>
</tr>
<tr>
<td></td>
<td>3. Packaging of the product is comfortable to hold.</td>
</tr>
<tr>
<td></td>
<td>4. Packaging size of the product suits my needs.</td>
</tr>
<tr>
<td></td>
<td>5. Packaging size of the product encourages me to buy it.</td>
</tr>
<tr>
<td></td>
<td>6. Packaging size of the product is easy to carry.</td>
</tr>
<tr>
<td></td>
<td>7. Packaging material of the product draw my attention.</td>
</tr>
<tr>
<td></td>
<td>8. Packaging material of the product is unique compared to other brands.</td>
</tr>
</tbody>
</table>

Cahyorini & Rusfian (2011)
<table>
<thead>
<tr>
<th>Product Information</th>
<th>3 items</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Product information on the product packaging is described clearly.</td>
<td></td>
</tr>
<tr>
<td>2. Product information on the product packaging inspires trust for the product.</td>
<td></td>
</tr>
<tr>
<td>3. Storage information on the product packaging is easy to follow.</td>
<td></td>
</tr>
</tbody>
</table>

Table 5 indicates packaging design construct; the construct was divided into 3 sub variables to be evaluated. They are graphic design, structure design and product information. For graphic design, it is evaluated by 15 items. The scale evaluated whether the consumers will purchase the product if the graphic of the product packaging design attracted them from several perspectives such as brand name, packaging color, font and pictures. While on structure design, it is evaluated by 10 items. The scale evaluated whether the consumers will purchase the product if the structure of the product packaging design attracted them through packaging shape, materials and size. Lastly, product information, it is evaluated by 3 items. The scale evaluated whether the consumers will purchase the product if the product information on the product packaging (e.g. information on labels, cartons and bottles) met their
requirement. The packaging constructs items are adopted from Cahyorini and Rusfian (2011).

Table 6: In-store promotion construct and measurement items

<table>
<thead>
<tr>
<th>Construct</th>
<th>Sample of measurement items</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-store promotion</td>
<td>1. I buy the products if the store highlights an attractive promotion</td>
<td>Shukla &amp; Banerjee (2013)</td>
</tr>
<tr>
<td>5 items</td>
<td>2. Promotions available in-store make me buy products spontaneously.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Promotions available in-store increase my desire to buy the products.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. Promotions available in-store entice me to buy things on the spur of the moment.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. Promotions available in-store remind me that I need the particular product.</td>
<td></td>
</tr>
</tbody>
</table>


Table 6 above indicates in-store promotion is evaluated by 5 items adopted from Shukla and Banerjee (2013). The scale evaluated consumers’ impulse purchase behavior will be influenced in-store promotion.
### Table 7: Price consciousness construct and measurement items

<table>
<thead>
<tr>
<th>Construct</th>
<th>Sample of measurement items</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Price consciousness 5 items</td>
<td>1. I am not willing to go to the extra effort to find lower-priced products</td>
<td>Shukla &amp; Banerjee (2013)</td>
</tr>
<tr>
<td></td>
<td>2. I shop at more than one store to take advantage of low prices for products</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. The money saved by finding a lower-priced product is usually not worth the time and effort</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4. I would never shop at more than one store to find low prices for products</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5. The time it takes to find low-priced products is usually not worth the effort</td>
<td></td>
</tr>
</tbody>
</table>


The above Table 7 indicates price consciousness is evaluated by 5 items adopted from Shukla and Banerjee (2013). The scale evaluated consumers’ impulse purchase will be influenced by price consciousness.
3.4 Data Scale of Measurement

Scale measurement is defined as “the process of assigning a set of description to represent the range of possible responses to a question about a particular object or construct” (Hair, Bush, & Ortinau, 2009). Close-ended questions or structured questions are used in this study whereby respondents are required to choose a response from a set of response options or scale points from the questionnaire (Hair et al., 2009). The researcher used the 3 types of scales named nominal scale, ordinal scale and interval scale in the study.

3.4.1 Nominal scale

A nominal scale is the simplest type of scale which request the respondent to provide some type of descriptor as the response (Hair et al., 2009) and it uses numbers as labels to identify and classify the individuals, objects, or events on a scale (Zikmund, Babin, Carr, & Griffin, 2013). This has allowed data to be placed into related categories. The demographic information in this project measured by nominal scale included gender, race, occupation and place purchasing grocery.

3.4.2 Ordinal scale

An ordinal scale has ranking properties where this scale enables respondents to express relative magnitude between the answer to a question (Hair et al., 2009). Ordinal scale allowed responses to be arranged according to their hierarchical pattern (Hair et al. 2009). The demographic information in this project measured by ordinal scale included age, educational level and monthly income.
3.4.3 Likert Scale

A Likert scale is a rating scale that request respondents to indicate their view on a series of mental belief or statement of a given topic (Hair et al., 2009). Five Likert Scale is most common and widely use in research questionnaire. Likert Scale is used in this study to reflect the effect of packaging design, in-store promotion and price influence consumers’ impulse purchase buying behavior in-store for non-food convenience goods. All variables will be measured on a Likert scale anchoring from 1 (Strongly disagree) to 5 (Strongly agree). Table 8 below shows the summary that will tap the magnitude of the differences.

Table 8: Summary of Likert scale used to measure variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Likert Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent Variables</strong></td>
<td>1=Strongly disagree</td>
</tr>
<tr>
<td>Impulse purchase</td>
<td>2=Disagree</td>
</tr>
<tr>
<td></td>
<td>3=Undecided</td>
</tr>
<tr>
<td><strong>Independent Variables</strong></td>
<td>4=Agree</td>
</tr>
<tr>
<td>Packaging Design</td>
<td>5=Strongly Agree</td>
</tr>
<tr>
<td>• Graphic Design</td>
<td></td>
</tr>
<tr>
<td>• Structure Design</td>
<td></td>
</tr>
<tr>
<td>• Product Information</td>
<td></td>
</tr>
<tr>
<td>In-store promotion</td>
<td></td>
</tr>
<tr>
<td>Price Consciousness</td>
<td></td>
</tr>
</tbody>
</table>

Source: Developed for research
3.5 Data Processing

In data processing stage, the researcher will compile the data collected and covert the information from a questionnaire and transfer to a data warehouse. (Hair et al., 2009). Referring to Malhotra et al. (2009), the whole process of data processing is guided by the initial plan of data analysis that was formulated during the research design phase. The first step is to examine the completed questionnaire, followed by editing, coding, transcribing the data and finally the data are cleaned and filtration for missing responses is prescribed (Malhotra et al., 2009).

3.5.1 Questionnaire Checking

The initial stage in data processing involves a thorough check on all questionnaires for completeness and interviewing quality while field work is still underway. In any case when problem arise in meeting the sampling requirement, it should be identified and carried out corrective action before the data are edited (Malhotra et al., 2009).

3.5.2 Editing

Next stage is editing, it is the review of questionnaire with the objective of increasing accuracy and precision. This process consists of screening questionnaires to identify illegible, incomplete, inconsistent, or ambiguous responses (Malhotra et al., 2009).

3.5.3 Coding

In the stage, the researcher will carry out coding process, the researcher assigned a code, usually a number, to each possible response to each question and this includes an indication of the column position (field) and data recorded it will occupy (Malhotra et
al., 2009). In this study’s questionnaire, all options of questionnaires are coded by using sequential numbers such as 1, 2, 3 etc. All of the numbers enable researchers to enter the data into SPSS easily.

3.5.4 Transcribing

In the stage of transcribing, it involves transferring the coded data from the questionnaires or coding sheets onto disk or magnetic tapes or directly into computers (Malhotra et al., 2009). In this research project, the Statistical Project for Social Science Version 20 (SPSS software version 20) will be used for transcribing data. The question in the questionnaire survey includes a mixture of “positively-keyed” and “negatively-keyed” items. Therefore, this need to be addressed before computing the scores on the questionnaires to proceed to perform further analyses.

In this research, the items for packaging design and in-store promotion are “positively-keyed” while impulse purchase and price consciousness are “negatively-keyed” items. Reverse scoring the negatively-keyed items need to be completed to ensure all of the items are consistent with each other. Hence, reverse scoring was done to the items from impulse purchase and price consciousness. During reversing the code process, all the scores from the questionnaires are recoded. The original scoring are 1=Strongly disagree, 2=Disagree, 3=Neutral, 4=Agree and 5=Strongly agree. After reverse the scoring, they become 1=Strongly agree, 2=Agree, 3=Neutral, 4=Disagree and 5=Strongly disagree.

3.5.5 Data Cleaning

The last stage of data processing will be data cleaning. In this stage, the data will be checked consistently and treatment of missing responses which are more through and extensive whereby consistency checks identify data that are out of range, logically
inconsistent or have extreme values which are inadmissible and must be corrected (Malhotra et al., 2009). Based on Malhorta et al. (2009), also mentioned that missing responses represent values of a variable that are unknown; either because respondents provide ambiguous answer or their answer was not properly recorded.

There are total of 437 sets questionnaires collected through the Google forms online. However, 17 sets had been filtered due to incomplete information. Thus, there are only 420 sets usable sample size for data analysis.

3.6 Data Analysis Techniques

For data analysis, the researcher will be using Statistical Package for Social Science (SPSS) version 20 program. The data will be tested for its normality through descriptive analysis with skewness and kurtosis. If the data is normal, parametric test can be conducted, if not normal, non-parametric test will be used. Multiple regressions will be used to measure the significance of the relationship involved for independents variables and dependent variables

3.5.1 Reliability

This test is to measure a respondent responds in the same manner to an identical or near-identical question (Burns & Bush, 2014). It is considered reliable if its repeated application results in consistent scores and concerned with the consistency of the research findings (Malhotra, 2009). This test is able to verify whether the items in the questionnaire are related to each other or vice versa. Cronbach’s Alpha of reliability test is used to examine the reliability of the measurement scale. Scales were analyzed in term of their reliability, by means of the internal consistency. Low reliability indicates the imperfection in the measuring process that influenced the research project in different ways each time when the measurement is taken (Zikmund, 2012).
Reliability test is conducted after collected the data from pilot test. This is to ensure that the constructs are reliable before proceed to distribute the questionnaires. According to the Sekaran & Bougie (2016), the reliability which less than 0.6 are consider poor, reliability test value that is in the range of 0.7 is consider good acceptable reliability, those more than 0.8 to 0.9 is considered good and the closer the Cronbach’s Alpha to 1 the higher the internal consistency.

### 3.5.2 Hypotheses Testing

As indicated in the framework, hypotheses H1, H2, H3 and H4 was tested by using the multiple regression for direct effect of independent variables to dependent variables, impulse purchase.

### 3.5.3 Descriptive Analysis

According to Burns & Bush (2014), the descriptive analysis is used to describe the variables (question responses) in a data matrix (all respondents’ answer). It is statistics normally associated with frequency analysis that helps to summarize the information presented in the frequency table. Basically, descriptive analysis is calculating Descriptive measure is typically used early in the analysis process and become foundation for subsequent analysis. The objective of descriptive analysis is able to provide accurate, simple, and meaningful figures by summarizing the dependent and independent variable in a large set of data. In this research, descriptive analysis is used to analyze the demographic data (gender, race, educational level, occupation and monthly income) and store preference to purchase grocery.

Frequency distribution is a tabulation of the number of times that each different value appears in a particular set of value (Burns & Bush 2014). Frequencies themselves are raw counts, and normally these frequencies are converted into percentages for
straightforward of comparison the variable (Burns & Bush, 2014). The percentage will breakdown into the various categories and these variables will be expressed in the percentage terms. In this research the frequency distribution of the variable will be presented in the form of tables. The objective is to obtain a count of the number of responses associated with different values of the variable (Malhotra, 2009). Hence, the frequency distribution will be used to summarize the demographic information and store preference to purchase grocery based on the questionnaires return by the respondents.

### 3.5.4 Multiple Regression Analysis

The multiple regression analysis involves more than one independent variable to predict a single dependent variable or used in the regression equation (Burns & Bush, 2014). The basis of this analysis is an assumption of straight-line relationship existing between the variables (Burns & Bush, 2014). According to Hair et al. (2009) multiple regression analysis is a statistical technique which analyzes the linear relationship between a dependent variable and independent variables by estimating coefficients for the equation and for a straight line. The equation in multiple regressions has the following form:

\[
y = a + b_1 x_1 + b_2 x_2 + b_3 x_3 + \ldots + b_m x_m
\]

Equation;

\[
y = a + b_{1GD} + b_{2SD} + b_{3PI} + b_{4ISP} + b_{5PC}
\]

Where

- GD = Graphic Design
- SD = Structure Design
- PI = Product Information
- ISP = In-store Promotion
- PC = Price Consciousness
With multiple regression analysis, the underlying conceptual model specifics that several independent variables are to be used, and it is important to determine which one is significant (Burns & Bush, 2014). The analysis enables the researcher to clearly identify which independent variables have great impact on the dependent variable. In addition to this, there are five basic questions used to determine the result in this study: are there a relationship exists; how strong the relationship is; are the relationship positively or negatively skewed; what the best way is to describe the relationship and what are the best means of fitting a straight line to the data.

In this research, the researcher will investigate the relationship between independent variables (packaging design, in-store promotion and price consciousness) and dependent variables (impulse purchase). Researcher will be able to understand the most significant factor that impulse purchase in-store and establish better strategy for to increase their market share in the market for non-food convenience goods.

### 3.6.5 ANOVA Analysis

According to Hair et al., (2015), Analysis of variance (ANOVA) is used to confirmed or identified the statistical difference between three or more means. It is a widely used statistical test which is used to analyze differences among three or more groups (Kucuk, Eyuboglu, Kucuk, & Degirmencioglu, 2016). There are three assumptions for ANOVA which included all samples are drawn from normally distributed population, all populations have common variance and lastly all samples are drawn independently of each other. In this research, ANOVA is used to explore different mean between packaging design, structure design and product information with impulse purchase.
3.7 Conclusion

According to Hair et al. (2009), there are many occurrences where both ethical and unethical behaviors may occur during the research process. These ethical issues need to be addressed and considered in social science or management research. This is because ethical issues are related to the integrity of the research and subject matter (Bryman and Bell, 2015). There are 3 major groups need to be taken care of in marketing research, they are the research user, the research information provider and the selected respondents (Hair et al., 2009). As the research user and information provider in this study, the researcher is well aware of the ethical practice and abide to it. Therefore, the survey questionnaires distributed does not require the respondents to fill in their personal contacts or names. The information will not be recorded.

In this chapter, all aspects of research design, data collection methods, sampling design, construct measurement and method of analysis are discussed. The result of the study will be discussed in detail later in Chapter 4.
CHAPTER 4
RESEARCH RESULTS AND FINDINGS

4.1 Introduction

This chapter presents the results and findings of the 420 responses which were administered in the period from 4\textsuperscript{th} March 2018 to 21\textsuperscript{st} March 2018. All 420 respondents completed the web-based survey. In this chapter, researcher will describe and interpret the data using selected statistical analysis scale. All results used for interpretation will be obtained from the output of SPSS 20 computation analysis software. The presentation of the results in this chapter includes reliability procedure prior to outline the key descriptive statistics of characteristics of the respondents and variables in the study. The chapter also covering the testing of the hypotheses and answer the research questions and lastly concludes with the summary of the quantitative findings.

4.2 Reliability test

Table shows the reliability analysis result for pilot testing of the research by using Cronbach’s Alpha Coefficient. The purpose of running reliability test is to ensure the dependability, stability, predictability, consistency and accuracy, and relates to the extend which any measuring procedure yields the same results on repeated trials (Kerlinger & Lee, 2007).
Table 9: Reliability Analysis Result for Pilot Testing

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Number of Items</th>
<th>Cronbach's Alpha Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product Design</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Graphic Design</td>
<td>16</td>
<td>0.916</td>
</tr>
<tr>
<td>2. Structure Design</td>
<td>10</td>
<td>0.816</td>
</tr>
<tr>
<td>3. Product Information</td>
<td>3</td>
<td>0.468</td>
</tr>
<tr>
<td><strong>In-store Promotion</strong></td>
<td>5</td>
<td>0.890</td>
</tr>
<tr>
<td><strong>Price Consciousness</strong></td>
<td>5</td>
<td>0.896</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dependent Variables</th>
<th>Number of Items</th>
<th>Cronbach's Alpha Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Impulse Purchase</strong></td>
<td>9</td>
<td>0.795</td>
</tr>
<tr>
<td><strong>Overall Variables</strong></td>
<td>48</td>
<td>0.838</td>
</tr>
</tbody>
</table>

Source: Developed for research

Based on Table 9, product information Cronbach’s Alpha Coefficient is below 0.6, it may due to the small sample size collected for the pilot test. Therefore, reliability test was run on overall variables to check on their reliability and resulted of the values of Cronbach’s Alpha Coefficient above 0.7. Therefore, all variables (independent and dependent) are reliable. For individual variable, all have achieved the recommended value as shown in Table 2 except product information. However, this variable is included in the product design and the overall Cronbach’s Alpha Coefficient is above 0.7, therefore, the variable will still be main in the study. The questionnaire is reliable
and proceeds to distribution for respondents. Questionnaire surveys are distributed by using snowballing method.

4.3 Descriptive Analysis

Total 437 sets of data have been received from the web-based survey but only 420 sets are completed without missing data (96.1% complete response rate). According to Saunder et al. (2012), sample size of 300 can be used to represent the whole population. Before proceed to statistical analyses, it is useful to study the overview description of respondents’ demographic background. This step is also important to test assumptions about variables.

4.3.1 Frequency of Respondents Based on Gender

Table 10: Distribution of Gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>173</td>
<td>41.2</td>
<td>41.2</td>
<td>41.2</td>
</tr>
<tr>
<td>Female</td>
<td>247</td>
<td>58.8</td>
<td>58.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>420</td>
<td>100.0</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

Source: Developed for research

Based on the output, there are 173 males (41.2%) and 147 females (57.9%) in the sample, giving a total of 420 respondents. The frequency of gender was shown on above Table 10.
### 4.3.2 Frequency of Respondents Based on Race

Table 11: Distribution of Race

<table>
<thead>
<tr>
<th>Race</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Malay</td>
<td>87</td>
<td>20.7</td>
<td>20.7</td>
<td>20.7</td>
</tr>
<tr>
<td>Chinese</td>
<td>300</td>
<td>71.4</td>
<td>71.4</td>
<td>92.1</td>
</tr>
<tr>
<td>Indian</td>
<td>22</td>
<td>5.2</td>
<td>5.2</td>
<td>97.4</td>
</tr>
<tr>
<td>Others</td>
<td>11</td>
<td>2.6</td>
<td>2.6</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>420</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Source: Developed for research

The above Table 11 presented the frequency of respondents of their race for this study. The majority of the respondents are Chinese with 300 (60.6%) respondents, followed by Malays with 87 (20.7%) respondents, Indians with 22 (5.2%) respondents and others (includes other indigenous groups which resides in Malaysia) with 11 (2.6%) respondents.

### 4.3.3 Frequency of Respondents Based on Age

Table 12: Distribution on Age

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-29 years</td>
<td>81</td>
<td>19.3</td>
<td>19.3</td>
<td>19.3</td>
</tr>
<tr>
<td>30-39 years</td>
<td>158</td>
<td>37.6</td>
<td>37.6</td>
<td>56.9</td>
</tr>
<tr>
<td>40-49 years</td>
<td>74</td>
<td>17.6</td>
<td>17.6</td>
<td>74.5</td>
</tr>
<tr>
<td>50 and above</td>
<td>107</td>
<td>25.5</td>
<td>25.5</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>420</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Source: Developed for research
The above Table 12 shows the respondents’ age, there are total of four range of age groups in this research. The highest responses fall under the range from 30-39 years old with 158 (37.6%) respondents, followed by age range from 50 and above with 107 (25.5%) respondents, age range from 20-29 years old with 81 (19.3%) respondents and lastly age range of 40-49 years old with 74 (17.6%) respondents.

4.3.4 Frequency of Respondents Based on Educational Level

Table 13: Distribution on Education Level

<table>
<thead>
<tr>
<th>Educational Level</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPM</td>
<td>27</td>
<td>6.4</td>
<td>6.4</td>
<td>6.4</td>
</tr>
<tr>
<td>STPM/Pre-U/Diploma</td>
<td>68</td>
<td>16.2</td>
<td>16.2</td>
<td>22.6</td>
</tr>
<tr>
<td>Bachelor Degree</td>
<td>215</td>
<td>51.2</td>
<td>51.2</td>
<td>73.8</td>
</tr>
<tr>
<td>Master Degree</td>
<td>100</td>
<td>23.8</td>
<td>23.8</td>
<td>97.6</td>
</tr>
<tr>
<td>Others</td>
<td>10</td>
<td>2.4</td>
<td>2.4</td>
<td>100</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>420</strong></td>
<td><strong>100</strong></td>
<td><strong>100</strong></td>
<td></td>
</tr>
</tbody>
</table>

Source: Developed for research

In terms of educational level, there are 215 (51.2%) respondents have obtained first degree, followed by 100 (23.8%) respondents with Master Degree and 37 (25%) respondents have at least SPM, PHD and other professional qualifications. The frequency of respondents was shown on Table 13.

4.3.5 Frequency of Respondents Based on Monthly Income

Table 14: Distribution on Monthly Income

<table>
<thead>
<tr>
<th>Monthly Income</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below MYR1,000</td>
<td>27</td>
<td>6.4</td>
<td>6.4</td>
<td>6.4</td>
</tr>
<tr>
<td>Monthly income range</td>
<td>No. of respondents</td>
<td>Percentage</td>
<td>Cumulative percentage</td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td>--------------------</td>
<td>------------</td>
<td>------------------------</td>
<td></td>
</tr>
<tr>
<td>MYR1,000-MYR2,999</td>
<td>55</td>
<td>13.1</td>
<td>13.1</td>
<td></td>
</tr>
<tr>
<td>MYR3,000-MYR4,999</td>
<td>80</td>
<td>19</td>
<td>32.2</td>
<td></td>
</tr>
<tr>
<td>MYR5,000 and above</td>
<td>258</td>
<td>61.4</td>
<td>93.6</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>420</td>
<td>100</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

Source: Developed for research

Monthly income may be a factor that will influence impulse purchase beside age group. Based on Table 14, 258 (61.4%) respondents received monthly income of MYR5,000 and above, while 80 (19%) respondents earning fall between MYR3,000-MYR4,999. There are 55 (13.1%) respondents income falls between MYR1,000-MYR2,999 and 27 (6.4%) respondents are below MYR1,000 which are mainly student or housewives.

### 4.3.6 Respondents Preferred Type of Grocery Store

Figure 3: Respondents Preferred Type Grocery Store

<table>
<thead>
<tr>
<th>Type of grocery store</th>
<th>No. of respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mini Market</td>
<td>214</td>
</tr>
<tr>
<td>Pharmacy</td>
<td>184</td>
</tr>
<tr>
<td>Supermarket/Hypermarket</td>
<td>400</td>
</tr>
<tr>
<td>Convenience Store</td>
<td>72</td>
</tr>
</tbody>
</table>

Source: Developed for research
Multiple answers are allowed for preferred type of grocery store. Refer to the above Figure 3 chart, 400 of the respondents preferred to do their grocery shopping at supermarket or hypermarket, followed by mini market with 214 respondents. Pharmacy and convenience store are least preferred store with 184 respondents and 72 respondents respectively.

4.3.7 Normality of the Constructs

Table 15: Normality of all of the constructs

Descriptive Statistics

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Minimum Statistic</th>
<th>Mean Statistic</th>
<th>Std. Deviation Statistic</th>
<th>Skewness Statistic</th>
<th>Std. Error</th>
<th>Kurtosis Statistic</th>
<th>Std. Error</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Impulse Purchase</td>
<td>420</td>
<td>1</td>
<td>2.88</td>
<td>.973</td>
<td>-0.036</td>
<td>.119</td>
<td>-1.140</td>
<td>.238</td>
</tr>
<tr>
<td>Average Graphic Design</td>
<td>420</td>
<td>1</td>
<td>3.67</td>
<td>.786</td>
<td>-1.170</td>
<td>.119</td>
<td>1.093</td>
<td>.238</td>
</tr>
<tr>
<td>Average Structure Design</td>
<td>420</td>
<td>1</td>
<td>3.73</td>
<td>.783</td>
<td>-1.442</td>
<td>.119</td>
<td>2.341</td>
<td>.238</td>
</tr>
<tr>
<td>Average Product Information</td>
<td>420</td>
<td>1</td>
<td>4.13</td>
<td>0.623</td>
<td>-.993</td>
<td>.119</td>
<td>3.959</td>
<td>.238</td>
</tr>
<tr>
<td>Average In-store Promotion</td>
<td>420</td>
<td>1</td>
<td>3.77</td>
<td>.867</td>
<td>-.906</td>
<td>.119</td>
<td>0.826</td>
<td>.238</td>
</tr>
<tr>
<td>Average Price Consciousness</td>
<td>420</td>
<td>1</td>
<td>3.07</td>
<td>1.068</td>
<td>-0.027</td>
<td>.119</td>
<td>-1.231</td>
<td>.238</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>420</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Developed for research

In order for data to be considered normal, Kline (2005) claimed that the acceptable range value of the skewness is (±3:3), and the range value of kurtosis is (±10:10).
Referring to the Table 15, all constructs skewness is within the range of (±3:3) and the range value of kurtosis is within (±10:10). Therefore, the data collected are considered normal distribution and there are no outliers found.

4.4 Hypotheses Testing

4.4.1 Multiple Regression Analysis

In this study, hypotheses H1, H2, H3, H4 and H5 were tested using Multiple Linear Regression analysis.

H1: Product graphic design will have a significant positive impact on impulse purchase behavior.

H2: Product structure design will have a significant positive impact on impulse purchase behavior.

H3: Product information will have a significant positive impact on impulse purchase behavior.

H4: In-store promotion will have a significant positive impact on impulse purchase behavior.

H5: Price consciousness will have a significant negative impact on impulse purchase behavior.
4.4.2 Multicollinearity Analysis

Table 16: Correlations for All Variables

*Correlations*

<table>
<thead>
<tr>
<th></th>
<th>Average Impulse Purchase</th>
<th>Average Graphic Design</th>
<th>Average Structure Design</th>
<th>Average Product Information</th>
<th>Average In-store Promotion</th>
<th>Average Price Consciousness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Impulse Purchase</td>
<td>1.000</td>
<td>0.132</td>
<td>0.111</td>
<td>0.043</td>
<td>0.165</td>
<td>-0.183</td>
</tr>
<tr>
<td>Average Graphic Design</td>
<td>0.132</td>
<td>1.000</td>
<td>0.410</td>
<td>0.207</td>
<td>0.165</td>
<td>-0.060</td>
</tr>
<tr>
<td>Average Structure Design</td>
<td>0.111</td>
<td>0.410</td>
<td>1.000</td>
<td>0.220</td>
<td>0.214</td>
<td>-0.086</td>
</tr>
<tr>
<td>Average Product Information</td>
<td>0.043</td>
<td>0.207</td>
<td>0.220</td>
<td>1.000</td>
<td>0.230</td>
<td>-0.006</td>
</tr>
<tr>
<td>Average In-store Promotion</td>
<td>0.165</td>
<td>0.165</td>
<td>0.214</td>
<td>0.230</td>
<td>1.000</td>
<td>0.089</td>
</tr>
<tr>
<td>Average Price Consciousness</td>
<td>-0.183</td>
<td>-0.060</td>
<td>-0.086</td>
<td>-0.006</td>
<td>0.089</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Source: Developed for research

From the table above, all the independent variables showed some relationship with dependent variable, impulse purchase. Although product information variable shown the least (.043), the variable will still be maintained for the study.

Table 17: Model Summary of Independent Variable

*Model Summary*

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.275a</td>
<td>.076</td>
<td>.064</td>
<td>.94126</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Average Price Consciousness, Average Product Information, Average Graphic Design, Average In-Store Promotion, Average Structure Design

Source: Developed for research
On the Table 17 above, R square shown 0.076 (7.6%). It indicated that the 7.6% variance had been explained by the 5 variables. The remaining 92.4% are contributing by other factors.

Table 18: ANOVA\textsuperscript{a} of Independent Variables

\textbf{ANOVA\textsuperscript{a}}

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>30.014</td>
<td>5</td>
<td>6.003</td>
<td>6.775</td>
<td>.000\textsuperscript{b}</td>
</tr>
<tr>
<td>1 Residual</td>
<td>366.793</td>
<td>414</td>
<td>.886</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>396.807</td>
<td>419</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\textsuperscript{a.} Dependent Variable: Average Impulse Purchase
\textsuperscript{b.} Predictors: (Constant), Average Price Consciousness, Average Product Information, Average Graphic Design, Average In-Store Promotion, Average Structure Design

Source: Developed for research

Although the R square is low, the ANOVA\textsuperscript{a} table shown that the statistical significance is high, P<0.01. It can explain that the 5 independent variables are able to predict impulse purchase.

Table 19: Coefficients\textsuperscript{a} of Independent Variables

\textbf{Coefficients\textsuperscript{a}}

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>B 2.32</td>
<td>Std. Error 0.4</td>
<td>5.795</td>
<td>0</td>
</tr>
<tr>
<td>Average Graphic Design</td>
<td>0.105</td>
<td>0.065</td>
<td>0.085</td>
<td>1.626</td>
</tr>
<tr>
<td>Average Structure Design</td>
<td>0.036</td>
<td>0.066</td>
<td>0.029</td>
<td>0.54</td>
</tr>
<tr>
<td>Average Product Information</td>
<td>-0.032</td>
<td>0.078</td>
<td>-0.021</td>
<td>-0.418</td>
</tr>
<tr>
<td>Average In-Store Promotion</td>
<td>0.187</td>
<td>0.056</td>
<td>0.166</td>
<td>3.346</td>
</tr>
<tr>
<td>Constructs</td>
<td>Significant value</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------</td>
<td>-------------------</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Impulse Purchase</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Graphic Design</td>
<td>0.105</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structure Design</td>
<td>0.589</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Product Information</td>
<td>0.676</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In-store Promotion</td>
<td>0.001</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Price Consciousness</td>
<td>0.000</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Developed for the research

4.4.3 Test of Significant
**Ho. There is a positive relationship between graphic design and impulse purchase.**

Based on Table 20, the significant value of graphic design was above $\alpha$-value of 0.05, which was 0.105. This indicated that there was no positive relationship between graphic design and impulse purchase. Therefore, H1 was rejected.

**Ho. There is a positive relationship between structure design and impulse purchase.**

Based on Table 18, the significant value of structure design was above $\alpha$-value of 0.05, which was 0.589. This indicated that there was no positive relationship between structure design and impulse purchase. Therefore, H2 was rejected.

**Ho. There is a positive relationship between product information and impulse purchase.**

Based on Table 18, the significant value of product information was above $\alpha$-value of 0.05, which was 0.676. This indicated that there was no positive relationship between product information and impulse purchase. Therefore, H3 was rejected.

**H1. There is a positive relationship between in-store promotion and impulse purchase.**

Based on Table 18, the significant value of in-store promotion was above $\alpha$-value of 0.05, which was 0.001. This indicated that there was a positive relationship between in-store promotion and impulse purchase. Therefore, H4 was not rejected.

**H1. There is a negative relationship between price consciousness and impulse purchase.**

Based on Table 18, the significant value of price consciousness was above $\alpha$-value of 0.05, which was 0.000. This indicated that there was a negative relationship between price consciousness and impulse purchase. Therefore, H5 was not rejected.
4.5 Conclusion

This chapter presented the result of interpretation from the collected data. The data are collected form questionnaire survey and insert the data to SPSS 20 to analyze the result. Based on the analysis carried out, the hypotheses testing on finding the direct effect of packaging design, in-store promotion and price influence consumers’ impulse buying behavior are concluded. The result enables researcher to obtain an in-depth understanding on the factors that post an effect on impulse purchase for non-food convenience goods. These results will be carried on to the following chapter, Chapter 5, to further discuss for causal and effects.
Chapter 5
DISCUSSION AND CONCLUSION

5.1 Introduction

In this chapter, an in-depth discussion and summary of the research findings will be presented. The research objectives and questions will be linked with the discussion and conclusion. The review of past literatures will be able to provide a general concept of the study. Besides that, the past literatures also strengthen and support research findings on the effects of impulse purchase behavior. With these findings, it provides valuable insights and highlights the main implication for marketers, retailers and manufacturers in Malaysia to promote and increase their sales for non-food convenience goods. They may use the information and plan ahead on their business strategy to strengthen their position in the market.

5.2 Discussion of Major Findings

The aims of this study are to examine the impact of packaging design, in-store promotion and price influence on consumers’ impulse buying behavior. In this study, researcher focuses on packaging design includes graphic design, structure design and product information, in-store promotion and price consciousness whether it will entice the impulse buying behavior of the consumers in Malaysia towards the non-food convenience goods.
5.2.1 Findings on the Hypotheses

**H1. There is a positive relationship between graphic design and impulse purchase.**

This research found that graphic design has no positive relationship with impulse purchase. This study contradicts with previous study suggests that graphic design elements of product packaging is proven to have influenced on the impulse purchase behavior of the consumers (Cahyorini & Rusfian, 2011). This was supported by the study of Nilson and Ostrom (2005).

**H2. There is a positive relationship between structure design and impulse purchase.**

Non-food convenience goods are chosen as the product category to be studied and it is considered as low involvement products (Kotler et. al, 2017). This research found that structure design has no positive relationship with impulse purchase. In the study of Silayoi and Speece (2004), it mentioned that visual element, graphic, size and shape positively influence the choice of low involvement products. However, the results from the present study was found contradict with previous study.

**H3. There is a positive relationship between product information and impulse purchase.**

This research found that product information has no positive relationship with impulse purchase. According to Butkevičienė et al. (2008) study, verbal communication on package is the most important element compare to non-verbal communication elements on choosing a shampoo package. This study complements with previous study suggests that product information is important element on choosing a non-food convenience goods, however, it is not significant enough to encourage impulse purchase.
**H4. There is a positive relationship between in-store promotion and impulse purchase.**

This research found that in-store promotion has significant effects on impulse purchase for non-food convenience goods. Based on the study of Zhou and Wong (2004), there is a significant positive relationship between in-store promotion and impulse purchase where the consumers are being influence through informative (shelf promotional poster) and experiential (in-store demonstration). In this study, researcher focused on the way consumers perceive the in-store promotion available in hypermarket/supermarket, convenience store, pharmacy and mini market. In-store promotion is the most commonly use promotional tools by the marketers, retailers and manufacturer and the study has proven that in the Malaysia context, consumers will still purchase impulsively when there is a promotion. The evidence also shown from the findings of this research where consumers prefer to shop in hypermarket/supermarket.

**H5. There is a negative relationship between price consciousness and impulse purchase.**

This research found that price consciousness has a negative relationship with impulse purchase on non-food convenience goods. Previous studies shown that price consciousness does play a negative role in consumer perception, however, it is also depending on the product category (Lichtenstein et al., 1993). This was supported by the study of Shukla and Banerjee (2014) where the researcher price consciousness is a nonsignificant predictor of impulse purchase as it may due to the nature of the product. In this study, the result shown that price consciousness does have a negative relationship with impulse purchase on non-food convenience goods. With the increasing of home brands and private brands in the market, it has created quite an intense competition where the consumers will switch easily in order to try on a new product as long as the price is reasonable.
5.3 Implications of the Study

5.3.1 Packaging Design

Based on earlier literature, the packaging design role is getting more important in marketing and communication to the consumers (Silayoi & Speece, 2004) and even been seen as one of the promotional tools or spokesperson for the manufacturer with their consumers (Raheem, Vishnu and Ahmed, 2014). Manufacturers usually use product packaging to differentiate their products from the shelf in-store, they will choose to use an impressive graphic elements, shape or size to attract the consumers attention. However, the present findings are different with past studies for both graphic and structure design (Cahyorini & Rusfian, 2011; Silayoi & Speece, 2004). The reason behind may due to the product chosen for the study. The earlier study was done on a specific food product where this study was conducted based on non-food convenience goods. Consumers’ impulsive buying behavior may be different between non-food convenience products against food products. The reason may due to the earlier study was done on food packaging in Thailand (Silayoi & Speece, 2004).

According to previous study, consumers in collectivist country will tends to be less impulse purchase, hence, they may behave differently towards the packaging design of the products. In this present study, using non-food product convenience goods for graphic design elements may be too general as the consumers may not be able to pick the right visual of the product and lack of focus during the survey. Another possibility may be due to the consumers in Malaysia shown little to no interest on the graphic and structure design when deciding on the purchase for non-food convenience goods. These findings provide an insight for the marketers, retailers and manufacturers. They may need to look for other possible factors in order to gain the awareness of the consumers to purchase impulsively on their non-food convenience goods, as graphic design and structure design may not provide a great impact.
The results of product information on the other hand is complementing the study of Butkevičienė et al. (2008). However, in this previous study, the researcher only use shampoo as one for the experimental testing, different product category result may differ. Besides, product information are usually important for consumers who are health conscious (Johri and Sahasakmontri, 1998) or environmental friendly. There are also studies where product information has significant effects on impulse purchase but again these studies were on food products (Estiri et al., 2010). Non-food convenience goods that are referring to external application or household applications products, in this study, the results shown that consumers pay less attention to the information on the labels of the products when it comes to external applications.

5.3.2 In-store promotion

Many marketers are still allocating a large sum of budget for in-store promotion to capture more market shares, launching of new products or to increase their sales. This promotional tool is still preferably in the context of Malaysia’s consumers. The in-store demonstration is often used by the marketers in the supermarket and it is still believe as one of the most effective ways to get the consumers to try out new products. The end-of-aisle display which are highly seen in most of the grocery stores does make an impact on attracting the consumers. According to Suher and Sorensen (2010), end-of-aisle display is a highly visible display area to get the products to be noticed by the consumers and influence on the consumers buying behavior in-store. It tends to create the urge for unplanned purchase. In US, 77% of the population use coupons and save more than US$ 3 billion in 2012 (Barat et al., 2012). It is also getting more popular in Malaysia where retailers (e.g. Tesco Malaysia) are now providing e-coupon for their loyal customers for a price rebate on certain product. In this research findings, it implied that in-store promotion is one of the factors affecting impulse purchase, however, the R-square of the overall model only explain 7.6% from the total 5 variables. Hence, marketers may need explore further on the major factors which
influence the impulse buying behavior of the consumers on non-food convenience goods.

5.3.3 Price Consciousness

This study confirmed that price consciousness has a negative relationship with impulse purchase. In this case, it shown that consumers in Malaysia tends to be price sensitive in terms of purchasing non-food convenience goods. The reason may due to the increasing of choices in the market place or close distance of grocery shops which enable the consumers to perform price comparison easily. Another reason may due to the growing of e-commerce, as there are more offers online for grocery items where consumers can check on the price before purchase them. If the consumers are price sensitive, the retailers and manufacturers may need to look into their pricing strategy when introducing a new product line. A low-price strategy may help them to penetrate the market to gain market share. Based on the findings, similar to in-store promotion, price consciousness may not be the main factors that affect impulse purchase. Therefore, further study requires to determine the main factors influencing consumer impulsive buying behavior.

5.4 Limitation of Study

There are limitations to the present research study, which must be considered for future research. The limitations are identified and some directions for possible extensions in the future are suggested.

First, the survey was distributed through Google online platform with snowballing sampling methods in two languages, English and Malays. Several challenges were identified on collecting data online through this sampling method. There are limited contact or interaction between the researcher and the respondents throughout the whole
session of data collection and limited control on the respondents’ interpretation of the questionnaires through this method where anyone that have access to the internet will be able to participate in the survey. Each respondent’s interpretation and understanding of the survey questionnaires may be different. Therefore, the survey was distributed through professional social media such as LinkedIn to obtain quality responses. One of the feedback received from a respondent through LinkedIn was that the questionnaire seems to be misleading. Again, this may be the interpretation of the respondent on the questionnaire itself as the questionnaires in this study were adapted from previous study and has been tested (Bruton et al., 1998; Cahyorini & Rusfian, 2011; Shukla & Banerjee, 2013). Snowballing sampling method is commonly use, however, it is impossible for the researcher to determine the sampling error or make inferences based on the obtained sample. For example, respondents may find it confusing on answering these questions one after another: “Even I see something I really like, I do not buy it unless it is a plan purchase” with “When I go shopping I buy things I had not intended to purchase”. Besides that, bias in informant responses has been considered during the research. Hence, a multiple informant approach was adopted and investigate further any ‘outlier’ responses as a counter measure to this limitation.

Secondly, there are no significant effects of packaging design and impulse purchase (graphic design sig = .105, structure design = .589, product information = .676). This present study only focused on non-food convenience goods excluding the food products which was included in the past studies. The study concluded that the impact of graphic design on non-food convenience goods in the Malaysia context is low and the sample size of 420 respondents is able to represent the population. Based on Saunder et al. (2012), a sample size of 300 can be used to represent the whole population. Therefore, generalization of product category to be included in the study should be made carefully.

Thirdly, in the present study, the researcher is only testing the significance of the variables for in-store purchase. Nowadays with the rapid development on internet has enabled the consumers can reach everywhere in the world to purchase a product. The evolution of the internet has enabled the community to transform from driving to the
store to purchase their groceries to ordering them online. As mentioned in the earlier literature review, e-commerce with its prompting promotion on daily basis allowing the consumer to make decision on the spot and believe to have influence on consumers’ unplanned purchase. However, this has not been taken into the consideration of this study.

Fourthly, the limitation of control on the demographic background of respondents, although the sample size consists of 420 data collection, the demographic background such as gender and race are not equally distributed. Therefore, the study does not take into consideration to include demographic background in the study. The result from 420 respondents can be considered as sufficient to represent the population in Malaysia.

Fifthly, this research was focused on respondents within Greater KL which has the highest average household consumption expenditure. Therefore, the findings of this research could not be generalized between highest and lowest household consumption areas in Malaysia.

Lastly, in most of previous studies, researchers used qualitative method through experimental stimulation as their methodology to test the significant effects on packaging design (Gelici-Zeko et al., 2012; Underwood et al., 2001). In experimental research, the researcher will design the data collection procedures cautiously, which they are able to manipulate a proposed causal independent variable and measure the effect of the dependent variable (Hair et al., 2009). By doing this, the researcher will also be able to control all other influencing variable (Hair et al., 2009). For example, the researchers from previous studies will select a few designs for the respondents to choose to test on their perceptions of the products. According to Underwood et al. (2001), consumers’ perceptions and choices vary from product to product and it may not be equally strong for the same products. In the present study, researcher is using quantitative method with survey questionnaires tested by previous researchers on a broad range of products. The coverage area may be too broad which the respondents
may not be perceiving the same products while completing the survey. Therefore, the final result from respondents might affect the accuracy of research findings.

5.5 Recommendations for Future Research

For future research study, the researcher should consider to include the following suggestions as stated below.

In this study, the researcher is unable to do intercept technique. Further study is recommended by collaborating with marketers and retailers to distribute the questionnaire to shoppers in-store. The result is believed to have a stronger impact with the respondents focusing on the selected products while completing the questionnaires. Researcher can even get more insights from the respondents on the way they perceive the product packaging and at the same time reduce the sampling error.

Secondly, this study focused on non-food convenience goods, where most of the previous studies were conducted on food products. Based on some respondents’ feedback through LinkedIn or other social media, they commented that they have difficulty on separating the food products and non-food convenience goods while completing the questionnaire. Therefore, future study can include to examine the food products as a generalization of convenience goods.

Thirdly, based on the result, the consumers in the Malaysia context are more sensitive to price changes on the non-food convenience goods. Future research can include other sales promotional tools beside in-store promotion as variables in their study as they may be the main factors influencing the consumers impulse purchase behavior. Other sales promotional tools that should be taken into consideration based on previous studies are in-store sales person or merchandiser, point of purchase advertisement and store environments (Mohan et al., 2013; Zhou & Wong, 2008; Park & Lennon, 2006).
Fourthly, the qualitative interview may be necessary in the future to be conducted in order to seek the findings in the existing questionnaire. This is because the existing questionnaire is based on a different culture while most of the research studies were done and tested in Western countries (Kacen & Lee, 2002; Hultén & Vanyushyn, 2014). The culture of Western and non-Western countries is different. Based on a previous study, Malaysia is considered as one of the countries with collectivism culture where consumers tend to have less impulse purchase compared to consumers with individualism culture (Western countries) (Kacen & Lee, 2002). Qualitative interview may help the researcher to narrow down and customized the questionnaire to suit Malaysia’s culture.

Fifthly, future research may consider to do experiential research by separating packaging design variable as an individual study. Stimulation of graphic and structure design can be narrowed down and respondents can be more focused while going through the experiential interview. The researcher can consider to eliminate the product information variable if it is non-food products as consumers pay less attention when it is not direct consumption.

Sixthly, besides culture, it is believed that consumers will spend more when they have higher spending power. Non-food convenience goods are considered to be low involvement product but this study has shown that price consciousness has a negative effect on impulse purchase. There is limited empirical study on income level with impulse purchase. Therefore, future research can be done on consumers with higher disposable income to determine whether they exhibit impulse purchase behavior.

Lastly, the future study should take into consideration the online impulsive purchase behavior. In the new technologies available to businesses and customers whereby the service and the personalized client approach have become necessities, one should expect that the marketing in the future will become not only more sophisticated but also much more interactive and individualized. Therefore, there is a need to look into the developments in the virtual marketplace, changing customer techno graphics and
technological innovation as it will present e-marketers with new tools and methods for enhancing their customers’ online purchase experience.

5.6 Conclusions

This study has evaluated the effects of packaging design, in-store promotion and price consciousness that impact consumer’s impulse purchase behavior on non-food convenience goods in a collectivist culture as in Malaysia. In-store promotion has significant positive effect on impulse purchase while price consciousness has a negative effect on impulse purchase. However, the packaging design with the three variables of graphic design, structure design and product information have no significant effects on consumer’s impulse purchase behavior.

Marketers should continue to do in-store promotions to generate impulse purchase among the consumers as the study shows that Malaysians will purchase impulsively when there is promotion in-store. Retailers on the other hand can work with marketers in providing a high traffic display shelf for promotional items as this will help the consumers to get access to the products easily before checking out at the cashier.

Retailers need to be very careful on setting their product prices as consumers in Malaysia are price conscious. This should apply, in particular to retailers that are located in the prime area where there are lots of choices for the consumers to purchase the non-food convenience goods. Further, marketers and manufacturers will need to decide their new product entry strategy as they need to consider the existing brands in the market, their positioning and pricing strategy. Failure to do so may lead to new product launch failures when the consumers are not willing to accept the retail price.

Further studies on the topic using qualitative approach is recommended together with other related factors that may be the main factors influence consumers’ impulse purchase behavior in a collectivist country such as Malaysia.
REFERENCES


Lee, R. (2016, May 2). Total retail space expected to continue increasing. Retrieved January 14, 2018, from https://www.edgeprop.my/content/total-retail-space-expected-continue-increasing


doi:10.1002/cb.1461


APPENDICES

1. Survey Questionnaires  A
2. Ethical Clearance Form  B
3. Personal Data Protection Statement  C
APPENDIX A

Survey Questionnaire

UNIVERSITI TUNKU ABDUL RAHMAN
FACULTY OF ACCOUNTANCY AND MANAGEMENT (FAM)
MASTER OF BUSINESS ADMINISTRATION

Dear Respondent,

Survey on The Effects of Packaging Design, In-store Promotion and Price that Influence Consumers’ Impulse Purchase Behavior In-store

I am a student pursuing a Master’s Degree at Universiti Tunku Abdul Rahman (UTAR), Malaysia. I am currently conducting a research study to examine the effects of packaging design, in-store promotion and price that influence consumers’ impulse buying behavior in-store in relation to non-food convenience goods. This research study is being conducted as one of the requirements of my Master's Degree, and targets respondents who reside within the Greater KL. The respondent’s identity will be kept anonymous and confidential.

This questionnaire contains only 2 sections, and it should take no more than 10 minutes to complete. Your answers are very important as they aid in the further understanding of consumers’ impulse buying behavior in Malaysia.

Thank you for your precious time and participation in this survey.
Your faithfully,
Chan Sook Fong

(Example of non-food convenience goods)
GENERAL INSTRUCTION

Most of the scales used in this survey use a rating system with descriptions at either end. The end points of the scales take the form of statements such as: 1: strongly disagree; 2: disagree; 3: neutral; 4: agree; 5: strongly agree. You are asked to answer every question by checking one and only one of the choices provided.

Please answer Section A & B of the survey.

Section A

<table>
<thead>
<tr>
<th>Questionnaire</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Impulse Purchase</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Even I see something I really like, I do not buy it unless it is a planned purchase.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. When I go shopping, I buy things I had not intended to purchase.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. I avoid buying things that are not on my shopping list.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. It is fun to buy spontaneously.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. I do not buy until I am sure I am getting a real bargain.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. For me buying grocery items is a spontaneous occurrence.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. For me buying grocery items can come “out of the blue”.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
8. Generally speaking, I can consider myself to be an impulsive shopper. 

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

9. When it comes to making grocery purchases, I usually purchase on an impulse.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**B. Graphic Design**

I will purchase if:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Brand name of the product draws my attention.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. Brand name on packaging reflects genuine origin of the manufacturer characteristics.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. Brand name of the packaging is unique compared to others.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. Brand name of the product packaging is easy to remember.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. Packaging colour composition on the product packaging draws my attention.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. Packaging colour composition on the product packaging is easy to remember.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. Packaging colour composition on the product packaging stands out on the shelves compared to other brands.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. Packaging colour composition on the product packaging creates a good mood.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. Font for the product packaging draws attention.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
10. Font for the product packaging is readable from a 1-meter distance.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

11. Font of the variants of the product packaging is readable from a 1-meter distance.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

12. Font for product ingredients information of the product packaging is easy to read.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

13. Picture on the product packaging draw my attention.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

14. Picture on the product is relevant.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

15. Picture on the product is attractive.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

16. Picture on the product packaging reflects genuine origin of the manufacturer characteristics.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

**C. Structure Design**

I will purchase if:

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

1. Packaging shape of the product draws my attention.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

2. Packaging of the product makes it easy to store.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

3. Packaging of the product is comfortable to hold.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

4. Packaging size of the product suits my needs.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

5. Packaging size of the product encourages me to buy it.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

6. Packaging size of the product is easy to carry.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>

7. Packaging material of the product draw my attention.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
</table>
8. Packaging material of the product is unique compared to other brands.  & 1 & 2 & 3 & 4 & 5  

9. Packaging material of the product reflects eco-friendliness.  & 1 & 2 & 3 & 4 & 5  

10. Packaging materials of the product reflects good quality.  & 1 & 2 & 3 & 4 & 5  

**D. Product Information**

I will purchase if:

1. Product information on the product packaging is described clearly.  & 1 & 2 & 3 & 4 & 5  

2. Product information on the product packaging inspires trust for the product.  & 1 & 2 & 3 & 4 & 5  

3. Storage information on the product packaging is easy to follow.  & 1 & 2 & 3 & 4 & 5  

**E. In-store promotion**

1. I buy the products if the store highlights an attractive promotion  & 1 & 2 & 3 & 4 & 5  

2. Promotions available in-store make me buy products spontaneously.  & 1 & 2 & 3 & 4 & 5  

3. Promotions available in-store increase my desire to buy the products.  & 1 & 2 & 3 & 4 & 5  

4. Promotions available in-store entice me to buy things on the spur of the moment.  & 1 & 2 & 3 & 4 & 5  

5. Promotions available in-store remind me that I need the particular product.  & 1 & 2 & 3 & 4 & 5  

**F. Price Consciousness**
1. I am not willing to go the extra effort to find lower-priced products.

2. I shop at more than one store to take advantage of low prices for products.

3. The money saved by finding a lower-priced product is usually not worth the time and effort.

4. I would never shop at more than one store to find low prices for products.

5. The time it takes to find low-priced products is usually not worth the effort.

Section B

INSTRUCTION: Please provide the following information about yourself by placing a (✓) on one of the square to assist us in analyzing the responses.

B1: Gender

☐ Male  ☐ Female

B2: Race

☐ Malay  ☐ Chinese

☐ Indian  ☐ Others………………(please specify)

B3: Age

☐ 20 and below  ☐ 20-29 years old

☐ 30-39 years old  ☐ 40-49 years old

☐ 50 and above

B4: Educational Level

☐ SPM  ☐ STPM/Pre-U/Diploma  ☐ Bachelor

Degree
<table>
<thead>
<tr>
<th>Option</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>Master Degree</td>
</tr>
<tr>
<td>☐</td>
<td>Others……………………………..(please specify)</td>
</tr>
</tbody>
</table>

**B5: Occupation**

<table>
<thead>
<tr>
<th>☐</th>
<th>Self-employed</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>Student</td>
</tr>
<tr>
<td>☐</td>
<td>Managerial/Professional</td>
</tr>
<tr>
<td>☐</td>
<td>Others………………….(please specify)</td>
</tr>
</tbody>
</table>

**B6: Monthly income**

<table>
<thead>
<tr>
<th>☐</th>
<th>Below RM1,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>RM1,000-RM2,999</td>
</tr>
<tr>
<td>☐</td>
<td>RM3,000-RM4,999</td>
</tr>
<tr>
<td>☐</td>
<td>RM5,000 and above</td>
</tr>
</tbody>
</table>

**B7: Where do you purchase your grocery?**

<table>
<thead>
<tr>
<th>☐</th>
<th>Convenience store (e.g. 7-Eleven)</th>
</tr>
</thead>
<tbody>
<tr>
<td>☐</td>
<td>Supermarket/Hypermarket (e.g. Aeon, Aeon Big, Tesco)</td>
</tr>
<tr>
<td>☐</td>
<td>Pharmacy (e.g. Guardian, Watson)</td>
</tr>
<tr>
<td>☐</td>
<td>Mini market (e.g. KK Mart, 99 Speed Mart)</td>
</tr>
</tbody>
</table>
Soal Selidik Tinjauan

UNIVERSITI TUNKU ABDUL RAHMAN
FACULTY OF ACCOUNTANCY AND MANAGEMENT (FAM)
MASTER OF BUSINESS ADMINISTRATION

Kepada Responden,

Kajian selidik mengenai kesan reka bentuk pembungkusan, promosi dalam kedai dan harga mempengaruhi pengguna untuk membeli dengan keadaan impuls dalam kedai

Saya, pelajar MBA daripada Universiti Tunku Abdul Rahman (UTAR), sedang menjalani project kajian bertopik “Kesan reka bentuk pembungkusan, promosi dalam kedai dan harga mempengaruhi pengguna untuk membeli dengan keadaan impuls dalam kedai untuk barang-barang kemudahan kecuali makanan”. Responden haruslah tinggal di kawasan dalam lingkungan ‘Greater KL’.


Terima kasih atas masa yang diluangkan.

Yang benar,
Chan Sook Fong
(Example of non-food convenience goods)
ARAHAN UMUM

Skala yang digunakan dalam kajian ini merupakan satu system pengiktirafan dengan deskripsi pada kedua-dua hujung. Titik hujung skala ini mengambil bentuk penyata seperti: 1= sangat tidak bersetuju; 2=tidak bersetuju; 3= neutral;4=Setuju;5=Amat Setuju Anda diminta menjawab setiap soalan dengan menanda satu pilihan.

Sila jawab bahagian A&B
Bahagian A

<table>
<thead>
<tr>
<th>Borang soal selidik</th>
<th>Sangat tidak bersetuju</th>
<th>Tidak setuju</th>
<th>Neutral</th>
<th>Setuju</th>
<th>Amat setuju</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Pembelian impuls</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Apabila saya terlihat sesuatu yang saya sukai, saya tidak akan membelinya melainkan ia ada dalam senarai pembelian saya.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. Apabila saya pergi membeli-belah, saya membeli barang-barang yang tidak dirancangkan terlebih dahulu.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. Saya mengelak daripada membeli barang-barang yang tidak termasuk dalam senarai membeli-belah saya.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. Saya rasa seronok untuk membeli secara spontan</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
5. Saya tidak membeli selainkan tawaran yang berbaloi ditawarkan
   1  2  3  4  5

   1  2  3  4  5

   1  2  3  4  5

8. Secara umumnya, saya dianggap sebagai pembeli impulsif.
   1  2  3  4  5

9. Semasa pembelian barangan runcit, saya biasanya membeli secara impuls.
   1  2  3  4  5

B. Reka bentuk grafik

   Saya akan membeli jika:

   1. Nama jenama produk menarik perhatian saya.
      1  2  3  4  5

   2. Nama jenama pada pembungkusan menunjukkan asal asli ciri pengeluar.
      1  2  3  4  5

      1  2  3  4  5

      1  2  3  4  5

   5. Komposisi warna pembungkusan produk menarik perhatian saya.
      1  2  3  4  5

      1  2  3  4  5
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<thead>
<tr>
<th></th>
<th>Komposisi warna pembungkusan produk menonjol di rak berbanding dengan jenama lain.</th>
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<tr>
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<table>
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<tr>
<th></th>
<th>Komposisi warna pembungkusan produk mencipta emosi yang baik.</th>
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<table>
<thead>
<tr>
<th></th>
<th>Jenis perkataan pembungkusan produk menarik perhatian.</th>
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<tbody>
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</tbody>
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<table>
<thead>
<tr>
<th></th>
<th>Jenis perkataan pembungkusan produk dapat dibaca dari jarak 1 meter.</th>
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<th></th>
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</thead>
<tbody>
<tr>
<td>1</td>
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<th>Jenis perkataan jenis pembungkusan produk boleh dibaca dari jarak 1 meter.</th>
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<td>5</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Jenis perkataan untuk maklumat produk bahan pembungkusan produk mudah dibaca.</th>
<th></th>
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</thead>
<tbody>
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</tbody>
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<table>
<thead>
<tr>
<th></th>
<th>Gambar pembungkusan produk menarik perhatian saya.</th>
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<table>
<thead>
<tr>
<th></th>
<th>Gambar produk ini sesuai.</th>
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<table>
<thead>
<tr>
<th></th>
<th>Gambar produk menarik.</th>
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</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Gambar bungkusan produk menunjukkan asal asli ciri pengeluar.</th>
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</tr>
</tbody>
</table>

### C. Reka Bentuk Struktur

<table>
<thead>
<tr>
<th></th>
<th>Bentuk pembungkusan produk menarik perhatian saya.</th>
<th></th>
<th></th>
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<th></th>
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</thead>
<tbody>
<tr>
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<td>5</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Pembungkusan produk menjadikannya mudah untuk disimpan.</th>
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</thead>
<tbody>
<tr>
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<td>5</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Pembungkusan produk adalah sesua untuk dipegang.</th>
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<tbody>
<tr>
<td>1</td>
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<td>4</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Saiz pembungkusan produk sesuai dengan keperluan saya.</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>
5. Saiz pembungkusan produk mendorongi saya membelinya.  
   | 1 | 2 | 3 | 4 | 5 |

   | 1 | 2 | 3 | 4 | 5 |

   | 1 | 2 | 3 | 4 | 5 |

8. Bahan pembungkusan produk adalah unik berbanding dengan jenama lain.  
   | 1 | 2 | 3 | 4 | 5 |

9. Bahan pembungkusan produk dapat dikitar semula  
   | 1 | 2 | 3 | 4 | 5 |

10. Bahan pembungkusan produk mempunyai kualiti yang baik.  
    | 1 | 2 | 3 | 4 | 5 |

D. Produk Informasi

Saya akan membeli jika:

1. Maklumat produk dinyatakan dengan jelas.  
   | 1 | 2 | 3 | 4 | 5 |

2. Maklumat produk memberi inspirasi kepada produk.  
   | 1 | 2 | 3 | 4 | 5 |

3. Maklumat simpanan adalah mudah untuk diikuti.  
   | 1 | 2 | 3 | 4 | 5 |

E. Promosi dalam kedai

1. Saya membeli produk jika kedai itu menawarkan promosi yang istimewa  
   | 1 | 2 | 3 | 4 | 5 |

2. Promosi mendorong saya membeli produk secara spontan.  
   | 1 | 2 | 3 | 4 | 5 |

3. Promosi meningkatkan keinginan saya untuk membeli produk.  
   | 1 | 2 | 3 | 4 | 5 |

4. Promosi menarik perhatian saya untuk membeli sesuatu produk pada saat itu  
   | 1 | 2 | 3 | 4 | 5 |

5. Promosi mengingati saya bahawa saya memerlukan produk tertentu.  
   | 1 | 2 | 3 | 4 | 5 |

F. Harga
1. Saya tidak mahu membazir usaha untuk mencari produk murah.  

2. Saya mengunjungi lebih daripada satu kedai untuk memastikan produk yang ingin dibeli ditawarkan dengan harga terendah.

3. Wang yang dijimatkan dengan mencari produk termurah di kedai-kedai biasanya tidak berbaloi dengan masa dan usaha yang sudah digunakan.

4. Saya tidak akan berbelanja di lebih daripada satu kedai untuk mencari harga yang rendah untuk produk.

5. Masa yang diperlukan untuk mencari produk berharga paling rendah antara kedai-kedai biasanya tidak berbaloi.

**Bahagian B**

**ARAHAN:** Sila berikan maklumat berikut tentang diri anda dengan meletakkan (√) salah satu daripada dataran untuk membantu kami menganalisis tindak balas.

B1: Jantina

☐ Lelaki  ☐ Perempuan

B2: Bangsa

☐ Melayu  ☐ Cina

☐ India  ☐ Lain-lain………………(sila nyatakan)

B3: Umur

☐ 20 tahun dan ke bawah  ☐ 20-29 tahun

☐ 30-39 tahun  ☐ 40-49 tahun
☐ 50 dan ke atas

B4: Tahap pendidikan
☐ SPM  ☐ STPM/Pre-U/Diploma  ☐ Sarjana
Muda
☐ Sarjana  ☐ Lain-lain………………(sila nyatakan)

B5: Pekerjaan
☐ Majikan  ☐ Pelajar
☐ Pengurus/Profesional  ☐ Lain-lain………………(sila nyatakan)

B6: Pendapatan Bulanan
☐ Bawah RM1,000  ☐ RM1,000-RM2,999
☐ RM3,000-RM4,999  ☐ RM5,000 dan keatas

B7: Dimana anda membeli kemudahan harian?
☐ Kedai runcit (e.g. 7-Eleven)  ☐ Pasar raya (e.g. Aeon, Aeon Big, Tesco)
☐ Farmasi (e.g. Guardian, Watson)  ☐ Pasar Mini (e.g. KK Mart, 99 Speed Mart)
APPENDIX B

Re: U/SERC/31/2018

7 March 2018

Dr Sia Bee Chuan
Department of International Business
Faculty of Accountancy and Management
Universiti Tunku Abdul Rahman
Jalan Sungai Long
Bandar Sungai Long
43000 Kajang
Selangor

Dear Dr Sia,

Ethical Approval For Research Project/Protocol

We refer to your application dated 16 January 2018 for ethical approval for your research project (Master student’s project) and are pleased to inform you that your application has been approved under expedited review.

The details of your research project are as follows:

<table>
<thead>
<tr>
<th>Research Title</th>
<th>The Effects of Packaging Design, In-Store Promotion and Price Influence Consumers’ Impulse Buying Behavior In-Store</th>
</tr>
</thead>
<tbody>
<tr>
<td>Investigator(s)</td>
<td>Dr Sia Bee Chuan Chan Sook Fong (UTAR Postgraduate Student)</td>
</tr>
<tr>
<td>Research Area</td>
<td>Social Sciences</td>
</tr>
<tr>
<td>Research Location</td>
<td>Klang Valley</td>
</tr>
<tr>
<td>No of Participants</td>
<td>400 participants (Age: 20 - 50)</td>
</tr>
<tr>
<td>Research Costs</td>
<td>Self-funded</td>
</tr>
<tr>
<td>Approval Validity</td>
<td>7 March 2018 - 6 March 2019</td>
</tr>
</tbody>
</table>

The conduct of this research is subject to the following:

(1) The participants’ informed consent be obtained prior to the commencement of the research;

(2) Confidentiality of participants’ personal data must be maintained; and

(3) Compliance with procedures set out in related policies of UTAR such as the UTAR Research Ethics and Code of Conduct, Code of Practice for Research Involving Humans and other related policies/guidelines.
Should you collect personal data of participants in your study, please have the participants sign the attached Personal Data Protection Statement for your records.

The University wishes you all the best in your research.

Thank you.

Yours sincerely,

Professor Ir Dr Lee Sze Wei
Chairman
UTAR Scientific and Ethical Review Committee
c.c. Dean, Faculty of Accountancy and Management
Director, Institute of Postgraduate Studies and Research
APPENDIX C

PERSONAL DATA PROTECTION STATEMENT

Please be informed that in accordance with Personal Data Protection Act 2010 ("PDPA") which came into force on 15 November 2013, Universiti Tunku Abdul Rahman ("UTAR") is hereby bound to make notice and require consent in relation to collection, recording, storage, usage and retention of personal information.

Notice:
1. The purposes for which your personal data may be used are inclusive but not limited to:-
   - For assessment of any application to UTAR
   - For processing any benefits and services
   - For communication purposes
   - For advertorial and news
   - For general administration and record purposes
   - For enhancing the value of education
   - For educational and related purposes consequential to UTAR
   - For the purpose of our corporate governance
   - For consideration as a guarantor for UTAR staff/student applying for his/her scholarship/study loan
2. Your personal data may be transferred and/or disclosed to third party and/or UTAR collaborative partners including but not limited to the respective and appointed outsourcing agents for purpose of fulfilling our obligations to you in respect of the purposes and all such other purposes that are related to the purposes and also in providing integrated services, maintaining and storing records. Your data may be shared when required by laws and when disclosure is necessary to comply with applicable laws.
3. Any personal information retained by UTAR shall be destroyed and/or deleted in accordance with our retention policy applicable for us in the event such information is no longer required.
4. UTAR is committed in ensuring the confidentiality, protection, security and accuracy of your personal information made available to us and it has been our ongoing strict policy to ensure that your personal information is accurate, complete, not misleading and updated. UTAR would also ensure that your personal data shall not be used for political and commercial purposes.

Consent:
1. By submitting this form you hereby authorise and consent to us processing (including disclosing) your personal data and any updates of your information, for the purposes and/or for any other purposes related to the purpose.
2. If you do not consent or subsequently withdraw your consent to the processing and disclosure of your personal data, UTAR will not be able to fulfill our obligations or to contact you or to assist you in respect of the purposes and/or for any other purposes related to the purpose.
3. You may access and update your personal data by writing to us at ____________________

Acknowledgment of Notice
[ ] I have been notified by you and that I hereby understood, consented and agreed per UTAR above notice.
[ ] I disagree, my personal data will not be processed.

........................................
Name: Chan Sook Fong
Date: 24th May 2018