

INFLUENCE OF SPORT PRODUCT PACKAGING ON CONSUMER DECISION

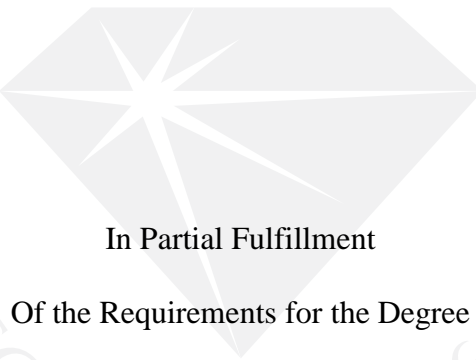
MAKING AT MTG FIGHTGEAR AT BANGKOK, THAILAND



INFLUENCE OF SPORT PRODUCT PACKAGING ON CONSUMER DECISION

MAKING AT MTG FIGHTGEAR AT BANGKOK, THAILAND

A Thesis Presented to  
The Graduate School of Bangkok University



In Partial Fulfillment  
Of the Requirements for the Degree  
Master of Business Administration

by

Mahsid Faheem

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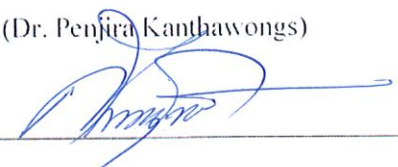
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### ABSTRACT

The business in the modern era faces many challenges to sustain sales and the growing number of competitors in the markets result in the business to imply different strategies to remain competitive in the market. Therefore, the traditional purpose of packaging has modified from just to protect and transport product to the tool of the promotion, to enhance the revenue capacity of the business. The package has become the tool of promotion which influences the consumer decision making process. This study is conducted with the aim to evaluate the packaging influence to the consumer decision making process and by dividing the packaging into three categories which influences the consumer decision making process. To explore the packaging influence on the consumer decision making, the packaging is divided into three factors, which are, attribute, design, and material of the packaging. Each identified factor is further divided into sub-factor, such as, the font style, colour, written information, makes the package attribute and the modernization of design, illustrations, uniqueness of design makes the package design and lastly the quality of material and eco-friendly material are sub factors of Package material. The objective of the research is to find out impact of packaging and its influence on consumer decision making.

To understand the packaging influence of the identified factors on consumer decision making process, the researcher select the quantitative approach to conduct the research. The measuring tool, questionnaire, is created and distributed to the consumer of the current members of MTG fightgear to complete questionnaires. The target population of the research is 1870 and the sample taken for pilot study is 40 and the main sample is calculated using Yamane (1973) equation as 328. A statistical software was used to analyze the data and it includes descriptive and regression analysis. As per the result from the collected data and using the mixed regression analysis to conclude that all the factors have positive influence on packaging and it has an influence on the consumer decision making process. Lastly, there are some recommendation for business, such to continuous invest on packaging attribute, create unique and different packaging, and use the green packaging to target the green consumer.

*Keywords: Packaging, packaging Attributes, package design, Package material, Consumer decision making*

Approved: \_\_\_\_\_  \_\_\_\_\_

Signature of Advisor

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## CHAPTER 1

### INTRODUCTION

This chapter presents the purpose of this study which includes the background of the study, statement of problems, intention, and a reason for the review, research objectives, research questions, assumptions, the scope of research, benefits of research, and limitations of research. The structure of the chapter is as follows:

- 1.1 Background
- 1.2 Statement of Problem
- 1.3 Intention and Reason for Study
- 1.4 Objectives of Research
- 1.5 Scope of Research
- 1.6 Research Assumptions
- 1.7 Benefits of Research
- 1.8 Limitations of Research
- 1.9 Conclusion

## 1.1 Background

In the 21<sup>st</sup> century, the healthy competition in the market has pushed the businesses to their edge, and the function of packaging has modernised. The traditional purpose of packaging is to protect and transport the product. However, the healthy competition in the global stage has added the promotional element to packaging function (Hamilton, Garretson, & Kerne, 2014). The creativity of packaging is to communicate the meaning to the consumer and aids in the consumer decision-making process (Underwood et al., 2001). Pilditch (1973) and Borishade & Ogunnaike (2015) further suggests that the packaging is a silent salesman, as it is the only communication between a consumer and the product at the final stage of the purchase. According to Silayoi & Speece (2004) and Rundh (2016), consumers have not spent enough thought about what kind of product they would like to purchase; the purchasing decision highly relies on communication at the point-of-purchase. It is further mentioned in Truong, Klink, Simmons, Grinstein & Palmer (2017) that Consumer's decision making is influenced by packaging attributes, such as font style, colour, the written information, and the design of the packaging; moderation, illustration and uniqueness of design. Hence, the researchers agree that packaging work as a communication tool for a product and creates the Unique Selling Point for a product and support the concept of point-of-purchase (Clement, 2007; Silayoi & Speece, 2004; Underhill & Ozanne, 1998).

The packaging of a product is the first thing seen before making purchase choices, and it is recognised that over 50% of purchasing decision is formed at the shelf, or point-of-purchase (Frontiers,1996; Ferrell,1987). There is a list of choices that are made by the consumer before making a purchase that initially starts once the

consumer shows willingness to purchase a product. The consumer then decides which product to get, model, size and what brand to buy, followed by how much time to spend, when to make the purchase and finally what method to use for payment (Housgard, Pytlik & Tzvetkova, 2010). In the modern era, the competition in the market is at best and entry to new market is becoming easy. In this competition era, the business investment on alternatives to make its product look different and attract new or existing customers (Mohebbi, 2014). The packaging has two core functions; first function is to protect the product and second function, to promote product to consumers. As per Ksenia (2013), the packaging is an important marketing tool which promotes the product and aids the consumer to differentiate the products from its competitors. Subramanian (2017) supports the view of Ksenia and the business does packaging to get the consumer's notice, this is achieved by different strategies implemented by the business such as, displaying the product, design of the packaging, information provided through labels to encourage potential buyers, which includes graphic design, physical design and having effective packages is important to the business success in the modern era. As mentioned by Rundh (2016) in his study, that packaging attributes attract consumer's attention to develop its image and influence the decision making of a consumer. Thus, packaging affects the consumer's decision making.

According to the Silayoi & Speece (2007) and Truong, Klink, Simmons, Grinstein & Palmer (2017), packaging has these following elements which should be kept in mind, written information, colour, font style, innovative and modernization of package, pictures and quality of package. All dimensions of packaging have a positive impact on the experience of the product and the consumer when making purchasing

decisions. In recent times, packaging of a product as became a useful tool for marketing of comfort for capture interest customers and gained a competitive advantage.

## 1.2 Statement of the problem

A statement of problem in research explains the issues that will be the topic of discussion for the research. As described by Wiersma (2010), problem statement provides with an outline of contrary points of the current situation and explains why these problems matter. Furthermore, the most crucial goal of the statement of the problem is to define the problem being addressed in a clear and precise way (Kush & Max, 2015). The statement of problem provides the reader to have an idea of the issues and reason for the research (Wiersma, 2010).

Consumer decision making and behaviour is one of the most studied topics in particular for management and academics. The predominantly researched area of the consumer decision-making process has been used to provide more understanding of the process. There are various factors, internal and external, that influence consumer decision making. It is frequently confirmed that the majority of consumer purchase decisions are made at the point of purchase (Housgard, Pytlik & Tzvetkova, 2010; Bruwer, 2016). Nevertheless, these decisions are still not entirely discovered since the mindset of the consumer, and the market is endlessly changing, and hypothetical model might be archaic and not be precise for the modern consumer when for example time saving and simplified decisions play a significant role (Clement, 2007).

It has been verified in Clement (2007) study that packaging has an impact on the consumers' purchase decision, but there are fewer studies that have been

conducted on the actual influence that might affect the buying behaviour of a consumer. Researchers such as Warlop & Pieters (1999), confirms that visual attention is the only method that consumer pays attention to in their decision-making. The consumer is influenced by the visual of a product, and that is what helps a consumer to make a decision, as mentioned in Clement (2007), a consumer is likely to purchase a product that is seen by the consumer.

MTG introduced new packaging for gloves in January 2019, and the data was noticed. The sales of gloves increase significantly from 2018 to 2019 for MTG, as shown in figure 1.1. The new visual on packaging attracts the majority of the customers, and it increases the sale, but there is a small group of customers that perceive the packaging in a way which influences their decision (MTG Sales Manager). The only element changed in the production of Gloves, including raw material was packaging.

Most importantly, marketers should consider that each information is perceived differently by consumer Clement (2007), and there should be a detailed understanding of the targeted group to communicate effectively.

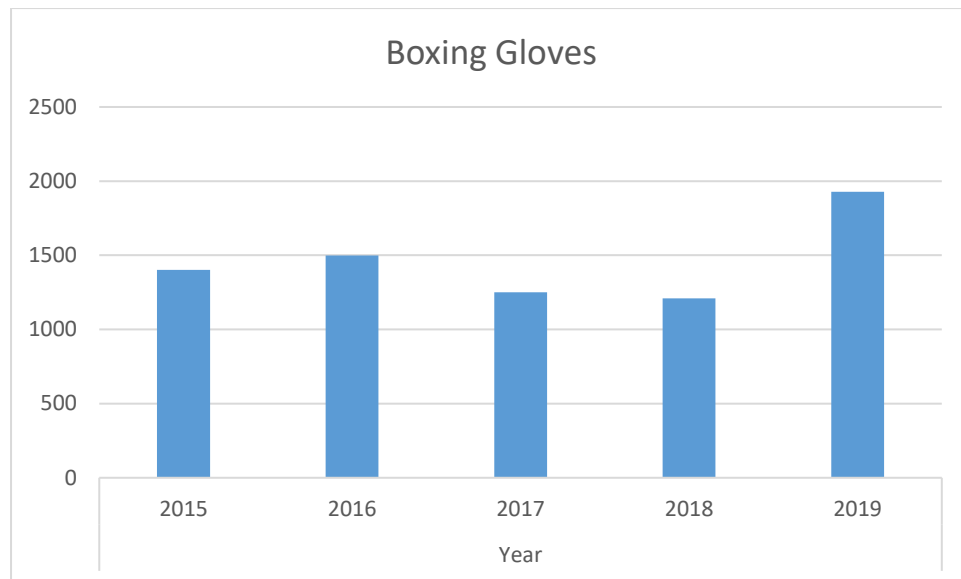


Figure 1.1 : An extraction of Boxing gloves summary (MTG Annual report, 2019)

The researcher must keep in consideration that consumers process the perceived information differently. As society is continually changing, consumer perception also changes, and it is essential to gain updated knowledge of emerging consumers segment regarding their decision-making process (Silayoi & Speece, 2007). The critical issue is to understand the relationship between consumer segment and the packaging attributes. However, this is very complex as each consumer respond differently to the packaging attributes (Silayoi & Speece, 2007). It is not only essential to know how the packaging attributes influence consumer decision-making but also how everyone responds to it, the response of each differs. However, it is very complicated since an individual consumer will react differently to packaging attributes (Speece & Silayoi, 2007). It is essential to know how consumers perceive the various type of packaging attributes in regards to their decision-making and also how they respond to each attribute (Housgard, Pytlik & Tzvetkova, 2010).

A consumer needs to feel and try the product before deciding if a consumer cannot try the product before making a purchase; it influences consumer decision making. It is stated by Sorensen & Widman (2016) in their research that new technology and technological progress in coating and lamination of package disables the consumer to open a package to try the product and it affects their decision making as a consumer would like to test the product before purchasing. It also prevents the products from damaging through the transportation process. MTG customers have complained in the past that some of the products get damaged during the transportation (Sales manager MTG, 2019).

The perception of the consumer towards the packaging material, such as plastic, can be a problem as well as the new awareness for recycling products has risen. As mentioned by Ajzen (2011) that consumer behaviour can be characterised into several models where the first one is based on the theory of planned behaviour (TPB). It is further explained by Richetin, Perugini, & Conner (2012) in their research that a sustainable consumer behaviour occurs when the consumer chooses to use recycled packaging and according to their personal believes it is to save the environment. As it can be seen in figure 1.1, the sale of the boxing gloves dropped in 2017 and 2018 due to usage of more plastic material as packaging, and there is an increase in sales of when the new packaging is introduced, with uses eco-friendly packaging.

### 1.3 Intention and reason for the study

In today's world, the growth of the market is highlighted by its capability of packaging. The packaging of a product plays an important in differentiating between

similar items of the same type of product provided by competitors. The study of Brewer & Rettie (2000); Robben & Schoormans (1997) states the package attributes are the most significant parts of product strategy. It is recognised that over 50% of purchasing decision is made at the shelf, or point-of-purchase (Frontiers,1996; Ferrell,1987). Therefore, Paswan & Holmes (2012), defines package as the independent marketing communicator that the consumer may receive while assessing the product.

The intention of the research is exploiting the factors of packaging that influences consumer decision making. The data provided by MTG, which is confidential and strictly used for this research only to see how the new packaging effect the sales and consumer judgement. This will lead to an internal analysis by MTG on the result of this research to get a better understanding of packaging. This research will also provide a piece of knowledge for future researchers who wish to research on similar field.

#### 1.4 Objective of the study

The outline of the research, along with the aim and purpose that regulates the depth, scope, and route of specific research. It is further explained by Dudovskiv (2018) as the first step of the research and may link with a hypothesis or used as a statement of purpose in a study that does not have a hypothesis. Even if the nature of the research is not clear to the layperson from the hypotheses, the reader should be able to understand the research from the objectives or get an idea (Dudovskiv, 2018).

This research has two main objectives, and the researcher defines the objective as a primary and secondary objective.



1. The primary objective of this research is to find out the impact of packaging on the consumer decision-making process and to the degree it affects the consumer decision-making process.
2. The secondary research is defined as the elements present in the packaging, which increase the packaging influences on the consumer decision-making process. The main factors are as follows; Packaging attributes, Package design and Package material. Those factors aid in improving the effectiveness of packaging.

### 1.5 Scope of the Study

The scope in research means all those things that the researcher will cover in one's research. It is further defined by Simon & Goes (2013) and Wade (2019) in their research as an extension of content that covers the means of the research to achieve logical conclusion and give convincing and reasonable answers to the study.

The scope of this research is to gain a deeper detailed understanding of consumer behaviour at the point of purchase and mainly how the packaging attributes, package design and package material influence consumer decision making. These factors are further divided into sub-factors, such as colour, font style, written information falls under packaging attributes, and the sub-factors of package design are the modernisation, differentiation and uniqueness of the design. The last factor, package material, covers the quality of package and eco-friendliness of the material. Since the consumer response is a part of their intellectual reasoning, the researcher attempts to understand this behaviour through the experimental quantitative method. Aliaga & Gunderson (2002) describe quantitative research as a method where the

collected data is numerical data, and it is analysed using statistics, or as their research stats mathematically based methods.

The data is provided by MTG is from 31<sup>st</sup> January '19 to 31<sup>st</sup> December'19. MTG introduced new packaging for boxing gloves on the dates that are mentioned above after the organisation's field trip for team building (CEO of MTG, 2018). After a long team discussion on how to increase the sale of MTG products, a new packaging concept was introduced; keeping the factors in mind that could influence consumer decision making (Tuk McNugget, Sales manager MTG, 2018). The new packaging was introduced on 31<sup>st</sup> January 2019 for the boxing gloves, and the concept of eco-friendliness with good quality and innovative and unique design was implemented.

There was an increase in sales when the new packaging for the boxing gloves was introduced in 2019, as shown in table 1.1. The study focuses on the members and regular customers of MTG. A membership card is given to a customer who would like to register with MTG (Head of Sales, MTG 2019), and each purchase is saved on MTG CRM system. The researcher focuses on boxing gloves as it was the most profitable and high in-demand product. It can be seen in figure 1.1(p10), that the gloves covered 46% of the total profit in the year 2019.

Table 1.1 : MTG Yearly summary of top-selling items (MTG Annual Report, 2019)

No	Equipment	Year					Profit Margin
		2015	2016	2017	2018	2019	
1	Boxing Gloves	1401	1499	1250	1209	1928	46%
2	Shin Guard	258	154	325	360	444	13%
3	Knee Protector	348	236	260	255	260	2%
4	Elbow Guard	560	647	423	635	780	6%
5	Ankle Guard	1236	1465	974	1542	1888	4%
6	Mouthguard	900	258	963	1248	1485	3%
7	Focus mitts	69	58	66	98	147	3%
8	Kick pads	54	90	21	95	162	5%
9	Muaythai Shorts	2147	1999	2158	3650	3122	13%
10	Muaythai Singlets	2589	2478	1984	2574	2555	6%



Figure 1.2 : Profit distribution chart ( MTG Annual Report, 2019)

As mentioned earlier in the research the packaging has a acute impact on the consumer at the point-of-purchase, and it influences consumer decision making, which is critical for the purchasing process, the relationship between consumer and

packaging is not methodically discussed. Hence, with a good understanding of today's consumers, packaging communication concerning attributes can be adjusted (Bruwer, 2016). The researcher intends to use the basic knowledge of the relationship between consumer and product packaging to draw more attention to this area of the academic field, where a further research is needed. The contributed consumer insights gathered through this research may also provide a basis for product managers as well as package designers of MTG, in their work for developing and implementing strategic marketing plans.

Furthermore, the research has a broader scope that emphasises the factors of packaging that influences the consumer decision-making process. As global competition has pushed the companies to perform best at the market and explore every opportunity in creating the Unique Selling Point (UPS) of product. Hence, the scope of the research is to identify the importance of packaging and its influence on current customers of MTG and the influence of packaging on consumer decision making.

#### 1.6 Research Assumption

According to Vogt (2011), the research assumption is a statement that suggests the research is accurate for a given period or only for a defined aim of the research, such knowledge is simply to build a theory. Vogt (2011) further suggest that the situation in which numerical based techniques are employed to give an effective outcome.

According to Simon (2011), the assumption in research is the control factors which control the result of your research. If no assumption is made that research turn

out to be unconnected and not relatable. The research problem can occur with an assumption (Leedy & Ormord, 2010). The research defines assumptions as of the basis of this research on previous credible research which is relevant to this research. The assumption of this research is based that respondents will have an interest in participating in the research. This study is truthful and reliable as the literature is research and used from a relevant source or relevant literature which its validity has been approved. This study aims to analyse the factors of packaging, which influences the consumer decision-making process.

### 1.7 Benefits of Research

Three main parties will benefit from this research. The first, party is the future researcher who intends to do further research on this topic or similar topics. Those individuals may benefit from the finding of this research and can explore more in the related field. This research will provide an understanding of packaging influence on consumer decision making to new researchers who are looking to explore more in a similar field. The second, party is business owners or the manager in the field of marketing, who can learn the importance of the packaging to the consumer decision making and can change the packaging according to needs of the market. The third party that will benefit from this research will be MTG. The company can design the package of their sports equipment according to the outcome of this research; hence an increase in the sale can be seen by the company.

### 1.8 Limitations of Research

Limitation of the research is best described by Simon & Goes (2013) and Wade (2019) as matters and occurrences that arise in research which are out of the

researcher's control, and it limits the extensity to which a researcher can go.

Furthermore, it can affect the result and the conclusion of the research. All the studies, a well-constructed and conducted, will always have limitations (Simon & Goes, *ibid*).

Simon (2011) describes limitation as possible weaknesses in the study, and that is out of the researcher's control. Certain classic limitations may include methodology limits, the sample size, rate of response and also the study span (Robert, 2011).

There are several limitations associated with this research. First, the research has limited time to research on the topic in detail, and the budget is limited to explore or selected larger sample size and to cover a larger area of the nation. Second, the research finds limited research on this topic.

#### 1.9 Conclusion

The overview of the research is presented in this chapter. This chapter provides enough knowledge for a reader to understand the direction of the research. The researcher has a mission to educate on how sports packaging influences consumer decision making. Keeping the scope of the research in mind, which is to study the relationship and influence of sports product packaging on consumer decision making at MTG fightgear Bangkok, Thailand. Furthermore, to understand the influence of packaging attributes, colours, font style, illustration and product information, on consumer decision making.

## CHAPTER 2

### LITERATURE REVIEW

This chapter presents the intentions of the literature review on this thesis research study as well as validating the research study by assessing the knowledge case on the topic which consists of the introduction,

The structure of this chapter is as follows:

#### 2.1 Introduction

#### 2.2 Packaging

##### 2.2.1 Attributes

##### 2.2.1.1 Font style

##### 2.2.1.2 Colour

##### 2.2.1.3 Written information

##### 2.2.2 Design

##### 2.2.2.1 Modernisation of the product packaging

##### 2.2.2.2 Designs on the illustrations.

##### 2.2.2.3 Uniqueness

##### 2.2.3 Material

##### 2.2.3.1 Quality of packaging

##### 2.2.3.2 Eco-friendly packaging material

2.3 Consumer decision making

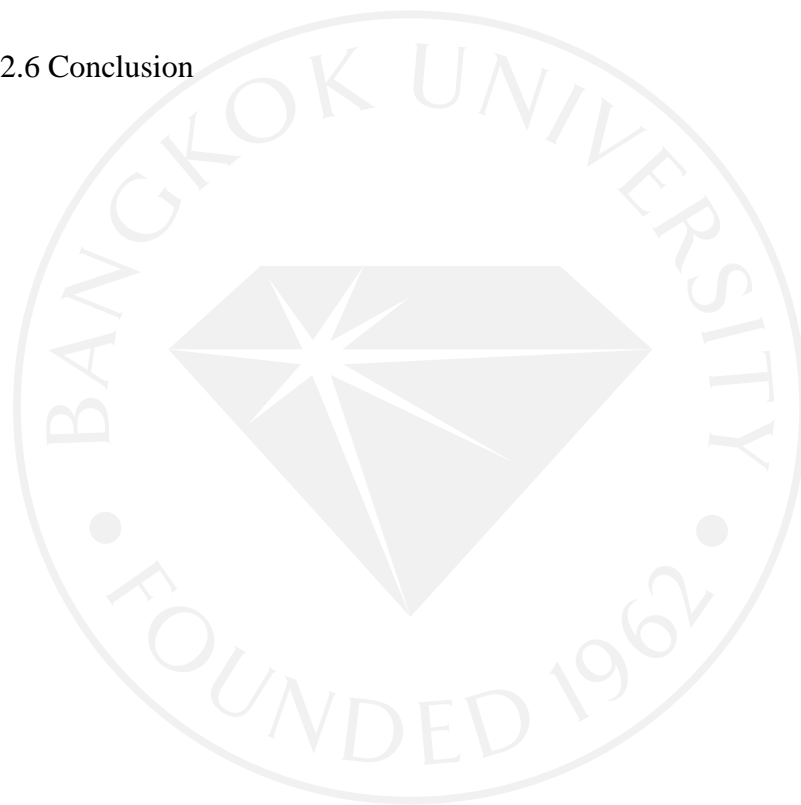
2.4 Relationship between packaging and consumer decision making.

2.6 Hypothesis

2.6.1 The hypothesis function

2.5 Conceptual framework

2.6 Conclusion





## 2.1 Introduction

A famous remark made in the work of Hiroataka (1989) stating that package has now much greater significance than in the past. At the time of circulation, the packaging should protect the content and secures its safety. However, in recent times the concept of packaging has changed, and the companies pay more attention to a package as a customer buys the packaging, not the product. It also affects the way management thinks about the product. A study by Clement (2007) shows that the visual attributes of a product that is attractive to a consumer are the innovative and modernized of packaging, colour, font style, written information and quality of material used for packaging. Packaging provides manufacturers with the last opportunity to convince buyers before brand selection (Ampuero & Vila, 2006).

This chapter discusses the literature and lays out a conceptual framework of the research.

## 2.2 Packaging

The packaging is a way of communication representation (Lincoln, 1965; Gardener, 1967). Product packaging acts as a product holder, which holds, conserves, safeguards, categorises the product and help in managing as well as commercialising (Giovannetti, 1995). Rundh (2016), agreed by saying that the product's packaging role is to define the product itself and also to communicate in addition to conveying the product's story to the consumers. It is further explained by Giovannetti (1995), that there are three different sorts of packaging; they are primary packaging, secondary packaging, and tertiary packaging. Primary packaging gives product protection (Giovannetti, 1995). Secondary packaging's

primary purpose is for branding display and logistical purposes and last but not least, tertiary packaging assists with handling, and protecting the product while transporting. The container in which the product packaged, is known as packaging, and the container is of different shape and consist of labelling, design, logo, materials used, and information about a product and colour or colour combination (Emily, 2010). Kotler (2003) defined the packaging as the process of designing the container to attract the consumer and provides the information on the product, which can be used as the promoting the product (Underwood & Klien, 2001; Garber, 2000; Goldberg, 1999).

It is suggested in Rundle (2005) research that the packaging is part of the product and it is the first element consumer touch and feel about the product and generates important feeling among the consumer about the product and directly influence the consumer decision to whether to purchase or not to purchase the product. Moreover, fewer of consumer believe that packaging is a useless element of the product, but in reality, the packaging protects, aids in transportation, provide information, conserve and facilitate handling the product before the product reaches consumer.

### 2.2.1 Attributes

As the packaging is a significant compound of product, the classification of the packaging attributes differs from one literature to another (Kuvykaite, 2009). As per Kuvykaite (2009), the colour, size, country of original, font, visual elements, product information and material of the packaging are the main elements of packaging attributes. Rundh (2009) agree with the statement of Kuvykaite (2009) and suggests

that the designs on product's package add to product's value and components such as font style, colour, and the written information are typically quite significant in the exterior look of the package. Rundh (2009) further stated that at the point of purchase, one of the main jobs of a product packaging design is to stand out and to grab attention. As mentioned on p18 of the research, the packaging attributes such as font style, colour and written information makes up the packaging attributes of a product (Imiru,2017).

#### 2.2.1.1 Font style

Loria (2016) propose that the font style on a package may contribute to effecting consumer's actions. Deliya & Parmar (2012) further added that inspiring font styles types and sizes printed on the product packaging design assist in attracting new customers to purchase the product. The font is an important part of packaging which attracts customer attention and provides with visible and clear information about the product, as the information can create contrary result. The information can be misleading or inaccurate if the message is not clear if dense writing styles printed on the package (Deliya & Parmar, 2012). Packaging font size is one of the main visual attributes when making a purchase decision (Kuvykaite et al., 2009). The larger packaging size is easily noticed and communicates higher value according to Silayoi & Speece (2004); Rundh (2016). The font style of packaging grabs customer attraction and the up-gradation of IT technology has supported this feature. The successful companies have best practices of the font styles. They hire a specialist in composing which create mind-blowing and attractive font styles. The attractive package has innovative font style.

### 2.2.1.2 Colour

Marketing literature reveals that the colour of the package can evoke the emotions and feeling of customer that influences their decision making (White & White, 2006; Mutsikiwa et al., 2013). The colours can create a deep and long-lasting impression on the consumer; hence, it is essential to select the right product packaging colour since it is needed to give consumers brand recognition and helps in making buying decisions (Gofman et al., 2010). In the packaging of products, marketers use colours to catch the customers' attention which in turn creates either a negative or positive feeling about the product. Asadhollahi & Givee (2007) suggest that the package colours communicate, reflect and exhibit some salient features and intangible attributes of the brand. It, therefore, means that the colours convey special messages about the brands which ultimately create a unique selling proposition. Therefore, the business needs to choose the right colours and choose the best colour combinations for their product packaging design. Deliya & Parmar (2012) proposed that how consumers view the product and make the package's colours may influence a buying decision.

### 2.2.1.3 Written information

It is further described by Asawangkura (2005) that the written information on the product's package should not be difficult to go through and should be able to apprehend easily. Vakratsas & Amber (1999) said that when consumers carelessly read and explore the written information on the product, it is categorised as a consumer's low contributions and may lead to not buying the product. While Silayoi & Speece (2004) propose that what may lead to purchase intentions is when consumers carefully evaluation the written information on the package. Informational

elements of the package play a vital role in decision-making (Silayoi & Speece, 2004, 2007; Rita, 2009; Kuvykaite et al., 2009; Rundh, 2016). Appropriately delivered information on the packaging has a strong impact on consumer purchase decisions, as this information reduces uncertainty and creates product credibility (Silayoi & Speece, 2004). Consumers are becoming more careful shoppers and pay more attention to label information as well as using the packaging information more extensively, as they are more health and nutrition-conscious (Coulson, 2000). The packaging may be the only communication between a product and the consumer in the store (Gonzalez, Thorhsbury, & Twede, 2007) and is the critical factor in consumer purchase decisions (Butkeviciene, Stravinskiene and Rutelione, 2008)

As mentioned on p.19 of the research the packaging attributes influence consumer decision making and the components, such as font style, colour and written information, plays an important part in making of the first variable of this research (Imiru, 2017). The packaging attributes has a positive influence on consumer decision making.

H1: The packaging attributes has a positive influence on consumer decision making.

### 2.2.2 Design

Kuvykaite, Dovaliene, & Navickine (2009) explained that the product package design is one of the reasons that lead to spontaneity purchasing. Bruce & Daly (2007), suggest that the customers' viewpoint on brand assessment may be inclined by the designs of the product's package. Deliya & Parmar (2012) discuss what the product package design defines how a brand is viewed in the market and is one of the reasons why a business has to pay attention to the package design. For a business to achieve a

particular marketing objective, product packaging design is one of the many elements to consider (Orth & Malkewitz, 2008).

The following point indicates what features on the product packaging design has an impact on consumer decision making

#### 2.2.2.1 Modernisation of the product packaging

By modernising the product packaging designs, it allows consumers to see the products as having high quality (Zekiri & Hasani, 2015). Rundh (2016) suggests that the modernisation of the package design is essential as it supports brands to be more user-friendly, prevent damage and easy storing packages. Modernisation on product packaging designs needs to handle challenges because the different product types need different product packaging designs and the favoured designs are the most capable ones (Rundh, 2013). Businesses need to be determined in coming up with distinctively fresh designs for the products (Wells, Farley, & Armstrong, 2007).

According to Mensonen & Hakola (2012), in the past, marketers used to concentrate on visual packaging design. Visual packaging consists of colours, graphic shapes and images, typography, and illustrations and marketers should focus on each of these attributes to create unique and innovative packaging designs (Venter et al., 2011).

The design of innovative packaging solutions requires marketers to have effective packaging designs that will ensure an organisation can make more revenue to cover the costs associated with creating the packaging solution. It might be difficult for organisations to realise some of their packaging design solutions because of the high costs incurred in creating the designs. Additionally, there might be hidden costs

in the production, filling, and sealing of the package (Rundh, 2013). Marketers must strive to have new innovative packaging designs that communicate value to a customer since they associate the product packaging design with the overall quality of the product. It's essential to carry out market research before developing a new design because marketers will be able to incorporate designs that are most favoured by millennial consumers. The current trends and behaviours of different consumers frequently influence new packaging design innovations (Karedza & Sikwila, 2017).

#### 2.2.2.2 Designs on the illustrations

Chaiwat (2008) asserts that packaging design can be a strategy to achieve organisational objectives. It's difficult to find products according to the package design, especially if there are many products on a shelf. Some packaging designs might have an untidy message format or too many elements on a single label. In such circumstances, consumers get confused when they are deciding which elements of the package design is the most important to consider before they purchase the product. An effective package design ensures consumers can access the product information faster, and consumers can choose the product among a variety of competing products. Marketers can ensure this by; having beautiful fonts, large font sizes, eye-catching colours, and images, etc. (Knight & Glaser, 2005). Products packages that have colours that look different on a shelf tend to attract customers. For example, a coloured product package on a shelf with black and white product packages would be the first one to be seen by shoppers. Graphic designs that are attractive influence consumers to purchase a particular product (Young, 2005).

### 2.2.2.3 Uniqueness of design

According to Jafari, Nia, Salehi, & Zahmatkesh (2013), organisations can use packaging designs to differentiate themselves from their competitors. In the past, packaging designs implemented a strategic tool to differentiate between similar products and give the organisation a competitive edge over their competitors. Packaging design can be used to differentiate between various sports products and create preferences among different brands. Brand preferences create customer loyalty, where customers will only insist on buying the product that they already know and trust. Orth & Malkewitz (2008) explain that details on the packaging design are significant as they influence the consumers' purchase decision. The consumers normally see the packaging design before they see the product itself. The quality of the product will, therefore, be assumed to be as good as the product's packaging design, meaning that marketers can influence the consumer's behaviour through packaging design. The primary goal of the packaging design is to differentiate the product from competitors to provide an edge and consumers can purchase the product. Packaging design helps in identifying a particular brand (Klimchuk & Krasovec, 2007). Long (2016) argues that millennial consumers have become a significant force in the industry such that their decisions prompt the marketers to differentiate their brands with unique and creative packaging.

H2 – Packaging design has a positive influence on consumer decision making.

### 2.2.3 Material

The packaging material is considered as the visual elements of the packaging. As the material helps to communicate the quality of the product, the packaging itself



communicate the meaning to the consumer and associates to the certain consumer instincts value linked with the material used in packing the product (Smith, 2004). As commonly agreed among the researchers that the material of packaging affects the perceived quality of a product (Oaya, Newman & Ezie, 2017). As per the consumer perceptions, packaging material could change the perceived quality of a product. The material of packaging differs according to the external environment, such as, in hot temperature, the packaging can suction high temperature as heating the product in a microwave or bear a low temperature. The packaging designed to support the functionality of the products, so the product can match the consumer expectations (Farooq, Habib & Aslam, 2015). The following are the material used in the packaging; paper/board, glass, steel, aluminium, plastics, composites, degradable plastics, and wood.

In the paper packaging, the cellulose fibres are used, which bonds with each other. The Carton boxes are cheaper and very effective and versatile packaging form and protect the product for contamination and breakage (Eva, 2006). For centuries, the glass is used as a packaging material and continues to be an important material for packaging, and any products in the modern era packed with glass. The heavy and bulk product packaged in steel material and steel has replaced the copper, iron, and tin as an alternative packaging material for the business (Eva, 2006). In the modern era, the plastics are most often used the material for the packaging as the plastic is a macromolecular polymeric material. The thermoplastics organic polymers are used in many of plastics packaging, this the core chain which consists of the carbon-carbon bonds. The plastic packaging material comes in the foils, which is 0.2 mm thick and 1 mm thick. This foil provides good protection to the product and easy to transported

and with an option to print on it and used as a promotional tool for the business (Eva, 2006). The composite is a process in packaging with a combination of two materials together, as the two or more separate layers of materials joined, the most board of the paper, and plastics and aluminium foil. The combinations were two or more material give advantages; the advantages can be seen in the form of the technological and economic point of views. The combination of two material creates flexibility, semi-rigid-wall packaging material (Eva, 2006). The composite combined in the following ways plastic-plastic, paper-plastic and cellophane composites. Then lastly, the material is the degradable plastic; this material can be re-entered in the carbon cycle by degradation into basic elements (Eva, 2006). Those are common material available for packaging and the sports gear usage the composites materials, as product produce are domination with plastics (Chanda & Roy,2007). As it helps in protecting the product, as the material of the packaging is like the product and option to print on the package.

The package design team of MTG considers the pros and cons of each material before deciding on the package, and the main priority is to produce eco-friendly packaging for the products and at the same time maintain the quality of packaging (Richie, Head of package design at MTG).

To maintain the quality of the packaging, the Total Quality Management is employed by the firms, MTG fightgear, and uses the regulation of ISO 9001. As the quality of packaging and material is employed, the eco-friendly is an important element as well. Therefore, the quality and eco-friendly are considered as the sub-factors of material.

### 2.2.3.1 The Quality of Packaging

The main function of the packaging is to protect the product and transported the product from manufacturers to distributor (Marsh & Bugusu, 2007). Kotler & Armstrong (2005) further suggest that quality is important, as it used as the promotional tool for the firm to promote its products. Therefore, the packaging quality is an important element, as the good quality of packaging aids in smooth transportation of the product and promote the product effectively. According to Kusnierz & Kawecka (2013), the quality assurance system or quality management is employed to assure the packaging quality and the quality of the packaging depends on; quality of raw material, proper storage of the raw material and production process, transportation and distribution processes in the organisation.

Moreover, the quality management emerges as the method for maintaining and setting standard processes and employed as the competitive tool with the motive to gain a competitive edge (Lourenc, Fonseca, & Mendens, 2012). To ensure that quality of high standards; the quality management implies different regulation structure to packaging quality, such as ISO 9001 quality standard.

The ISO 9000 is a global concept, and the packaging with ISO 9000/9001 mark is considered of high quality. The phenomenon was first established in 1987 and suffered its first review in 1994 (Quazi, 2002). The review process continues, and in 2000 deeper analyse was made, and the principle of ISO 9000 is line with Total Quality Management (Feng, Terzivoski, & Samson, 2008). The TQM change the philosophy of quality assurance to the quality management process. In 2008 new

requirement was introduced to ISO 9000 and the new edition of ISO 9000 is ISO 9001 (Lourenc, Fonseca, & Mendens, 2012).

The consensual set of standards, which needed the applicable and flexible to all and emphasised on the effectiveness of the Quality Management System is classified as ISO 9001 (Lourenc, et. al, 2012). The certified product or packaging should satisfy and determine the set requirement, expectations and needs of consumer and other stakeholders by the application of the TQM system, throughout its structure, that proven the principles of the management control and promise continuous improvement. Moreover, the quality requirement of ISO 9001 depends on the types of products and the external environment (Poksinska, 2010). The mixture of the internal and external environment, to bring out the best practice and implementation of the ISO 9001 in an organisation. The internal environments present the organisation conditions such as; internal motivation, how the ISO strategy is implemented in the organisation, maturity level of quality management and stakeholder involvement (Lourenc et al., 2012). The external environment is elements which aid the firms to gain the certification of ISO 9001 and any product with ISO 9001, presents that the packaging is of high quality and set regulation is meet by the firms (Bhuiyan & Alam, 2004; Castks et al., 2007 and Rawahi & Bashir, 2011). Therefore, for this study, the ISO 9001 is considered as an important element of packaging quality.

#### 2.2.3.2 Eco-friendly Material

Historically, the packaging has two possible impacts on the environment. The first impact talks about, the impact of packaging on the environment and suggested the packaging material as a waste to the environment and to some extent harm to the

environment (Vujkovic & Matavuly, 2003). The second reason considered the whole life cycle of the package, from the raw material used in the packaging to the waste management system. Vujkovic, Gvozdencovic, & Cukakovic (1993) classified it as “from the cradle to the grave”. In the eco-friendly packaging, the green packaging material is used. The green packaging materials are those which can be renewed and reusable material, natural paper material, edible packaging materials and biodegradable materials (Zheng, 2012).

The design methodology helps in identifying the environmentally friendly packaging design, and the main objective of environmentally friendly packaging is to reduce the waste and use the material which protects the product and, recycle easier and eco-friendly (Zheng, 2012). The main preceding of the green packaging material needs to have the appropriate characteristic with differentiated to the non-eco-friendly material. As the different material is used by traditional and eco-friendly material, the eco-friendly packaging design has its own selective advantage and give birth to the concept of green consumer or green marketing.

There is a number of definition of green marketing. According to Chandhary, Tripathi, & Monga (2001), the concept of green marketing first introduced in the 1970s and defined as “ecological marketing” by the American Marketing Association (n.d). The green marketing activity is a wide range of production activity which emphasises on satisfying the consumers' need and wants, at the time reduce waste to the natural environment or diminish the negative impact on the natural environment (Tiwari, Tripathi, Srivastave, &Yadav, 2011). According to Sarkar (2012), green marketing referred to as an activity of promoting the marketing mix with eco-

concerns. The green marketing and eco-friendly does influence the consumer and impact the consumer purchasing decision. Past researches and studies demonstrate a positive relationship between the consumers and eco-friendly packaging, as the consumer considered the with green concept to be social responsibility (SR), their environmental consciousness, and their environmentally friendly behaviour, and firm practice the green material in the packaging indicate that they are SR and has environmentally friendly behaviour (Lee et al., 2012). Consumer perceptions of SR initiative appear to indicate a strong influence on the consumer awareness of SR activities, in turn, impact environmentally friendly behaviour of consumer (Smith, 2015).

H3 – Packaging material has a positive influence on consumer decision making.

### 2.3 Consumer decision making

The process of consumer decision-making is divided into five parts. The first stages in classified define as problem recognition, evaluating an alternative, search information, purchase decision, and post-purchase (Keller, 2003; Kolter, 2007). The decision-making process starts when a consumer recognises there is needed to be satisfied. According to Kolter (2003), this the first step in consumer decision making. Here the problem recognition and demand for the product start. The consumer needs are categories into many layers, and the Maslow needs laws (1943) best explain the consumer needs after the actual purchase comes post-purchase behaviour where the consumer evaluates the received satisfaction level (Kotler & Armstrong, 2010). Panda, Paswan, & Mishra (2019) suggest that the consumer can skip a few stages during a routine purchase. However, when a consumer faces a new and complex

purchase situation, all these five stages that are shown in Figure 2, need to be used to complete the buying process.

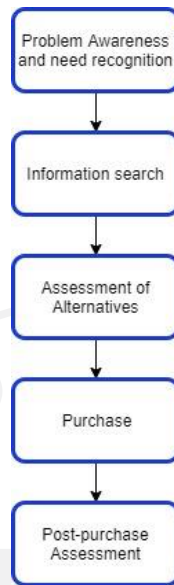


Figure 2.1: A buyer's decision-making process (Riley, 2012)

The process of decision making starts with the recognition of the need and there are a few types of classifications of need recognition. One type is where the buyer recognises the need that is triggered by internal or external stimuli. Internal stimuli are human's basic needs. External stimuli can be, for example, an advertisement that can get you to thinking about buying a new computer. (Kotler & Armstrong, 2010; Panda, Paswan, & Mishra, 2019). The need recognition process can occur naturally, but often marketers can set it in motion. Marketers will try to create a demand where consumers are encouraged to purchase their product regardless of the brand (Solomon, 2004).

The second stage of the decision-making process, the consumer engages with information search. Consumers can choose products without any information and other times; information needs to be searched carefully for identifying all alternatives.

(Solomon, 2004) The consumer can get information from multiple sources by talking with friends or family, reading magazines or using the Internet search or handling the product. In recent times, consumers get a massive amount of data from commercial sources that are controlled by marketers and the most valuable sources tend to be personal such as family or friends. Consumers can obtain information and increase awareness of available brands and this information helps consumers to drop some brands when making the final selection of the brand (Kotler & Armstrong, 2010)

Once the data is collected, then the consumer will be able to assess the different alternatives. The evaluation of alternatives will vary among customers and purchases. (Wright, 2006). In some cases, customers make little or no evaluation and make their buying decision based on impulse and intuition. In cases where little or no evaluation of alternatives is used can be originated by a systematic decision process. On the other hand, the consumers who are engaged in an extended problem-solving process may carefully evaluate among several brands. Even if a consumer ponders among many alternatives, the evoked set usually includes only a small number of alternatives. These alternatives share a few similar features. (Solomon, 2004)

At the fourth stage, the consumer is ready to proceed to the actual purchase. The consumer's purchase decision is to buy the most preferred brand. Some factors can affect the consumer's buying decision, such as the attitudes of others or beliefs about the brand created by marketers (Kotler & Armstrong, 2010). To simplify purchasing decisions, consumers can make mental shortcuts that can lead to hasty decisions. Particularly when limited problem solving occurs before making a choice. These kinds of shortcuts can range from universal thoughts like "higher price products are



higher quality" or "buy the same brand than last time" to specific "buy the same brand that my mother used to buy." These shortcuts can turn out to be unfavourable to the consumer. (Solomon, 2004)

The last stage of the buying process is post-purchase behaviour. After the consumer has purchased the product, the consumer will evaluate the satisfaction level. If the consumer feels disappointment, expectations towards the product have not been met. (Khan, 2006) If the product meets expectations, the consumer will be satisfied and willing to spend more on this specific brand in the future. Furthermore, consumers' high level of satisfaction can be translated into brand loyalty. This usually happens when consumers' expectations have been exceeded. (Kardes, 2011)

#### 2.4 Summary of packaging and consumer decision making

Product packaging is used for protecting a product from the external environment and promotion purposes (Raheem, Ahmad, Vishnu and Imamuddin, 2014). Packaging and its sub-factors have a positive effect on consumer decision making (Ahmad, Billoo and Lakhan, 2012). Raheem, Ahmad, Vishnu and Imamuddin (2014) suggest that the process of consumer decisions lack objectivity, consistency and rationality. Therefore, they often make a judgment of quality based on packaging. Prior studies have found that packaging is an important tool for promoting products and stimulating purchase intentions (Rundh, 2016). The design, quality and colour of packaging also have a strong influence on consumer decision making (Raheem, Ahmed, Vishnu and Imamuddin, 2014). It has also been suggested that packaging is an ultimate selling proposition which helps consumers to differentiate products (Underwood, 2003; Silayoi, and Speece, 2007; Bagozzi, Yi and Baumgartner, 1990).

Mueller and Lockshin (2008) found a strong association between product packaging, consumer purchase intentions and brand experience. The visual appeal of product packaging is also a medium for marketing promotions (Silayoi & Speece, 2007; Rundh, 2016). When consumers purchase high involvement products, they give more importance to written information on packaging labels. In low involvement products, consumer purchase intentions depend on the design of packaging (Sehrawet & Kundu, 2007).

Consumer purchasing process depends on various factors including price, packaging, promotion and previous experience (Shafi, Raza & Rehman, 2011). When consumers purchase a product, they rely on internal search and external search. Internal search is based on consumers past product experience. On the contrary, an external search is based on the experience of other consumers who have shared their views on social media (Keller, 2001). For this research, the researcher will focus on MTG members, means consumers with past experience. Purchase intentions also depend on product categories, demographics and the moods of consumers (Kamaruddin & Kamarulzaman, 2009). The consumer is likely to purchase the product after the evaluation and has mentioned in Keller (2001) research, a consumer with high purchase intentions generally leads to actual purchase. There are several factors that influence consumer decision making, such as brand image, packaging and experience of peers. Consumer decision making helps marketers to forecast future consumer behaviour and develop appropriate marketing strategies. Therefore, marketers aim to enhance consumer purchase intentions which directly influence consumer's actual behaviour (Morwitz, 2014).

## 2.5 Hypothesis

The researcher of the research does not know the outcome of the research. Hence, the previous studies, which suggests the researcher about the possible outcome the research can obtain from the research. Base on curiosity and hunch, the research tests the collected data and enable the researcher to decide whether the assumptions were correct or incorrect. Therefore, the development of a hypothesis, aids in supporting the ideas of the research. Bailey (1978) define a hypothesis as a proposition in Table form and predicts a specific relationship between two or more variables. The literature of the research may or may not suggest that the relationship exists, hence creating a hypothesis is essential and to test the hypothesis. Grinnell (1988) stated that the hypothesis is written in a manner, which disproves or proves the validity and reliability of the data.

The research in the past and present arguments over the definition of the hypothesis, but common agree the hypothesis design demonstrate the interrelationships of the research question, literature review, theoretical framework, and hypothesis (Menese et al., 2007).

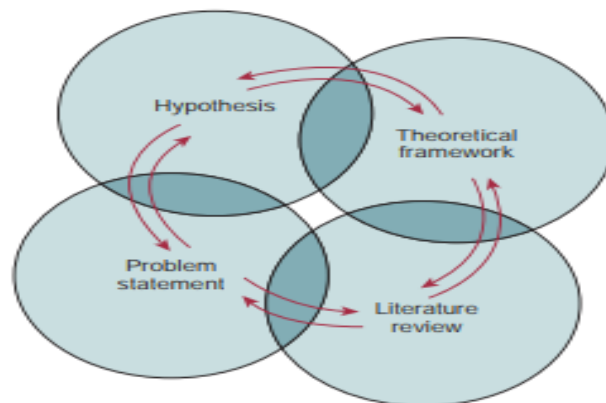


Figure 2.2 : The Figure of Hypothesis (Haber,2009)

### 2.5.1 The Hypothesis Functions

There are many feature and functions of the hypothesis. First, is to enhance the objectivity and aim of the research work. Second, give the study aim and focus and suggest the researcher the scope of the study and the problem to investigate. Third, aids the study in prioritising data collection; therefore, it provides the focus on the research. Lastly, ensure the formulation of theory for a study to specifically conclude what is correct and what is incorrect. Hence the figure 2.3, present the processes involved in testing whether a hypothesis is false or true. Hence, the resting hypothesis is crucial to ensure the verification of the research outcome.



Figure 2.3 : Hypothesis testing process (Kumar,2011)

Therefore, the development of the hypothesis in this study aids to identify the relationship and test the relationship between the two variables; also to test the reliability and to accept or reject the created hypothesis in the research.

### 2.6 Conceptual framework

Theoretical and conceptual frameworks guide the paths of research and offer the foundation for establishing its credibility. It is the 'blueprint' or guides for research (Grant & Osanloo, 2014). Though these terms seem similar, they are different from each other in concept and their roles in the research inquiry. However, it is difficult and confusing to distinguish between these two closely related frameworks while defining their roles in their research. The inclusion of a theoretical and conceptual

framework is a mandatory requirement in a thesis or dissertation that shows the map of the research scholar seeks to undertake. A good comprehension of both frameworks would inure to a reasonable investigation.

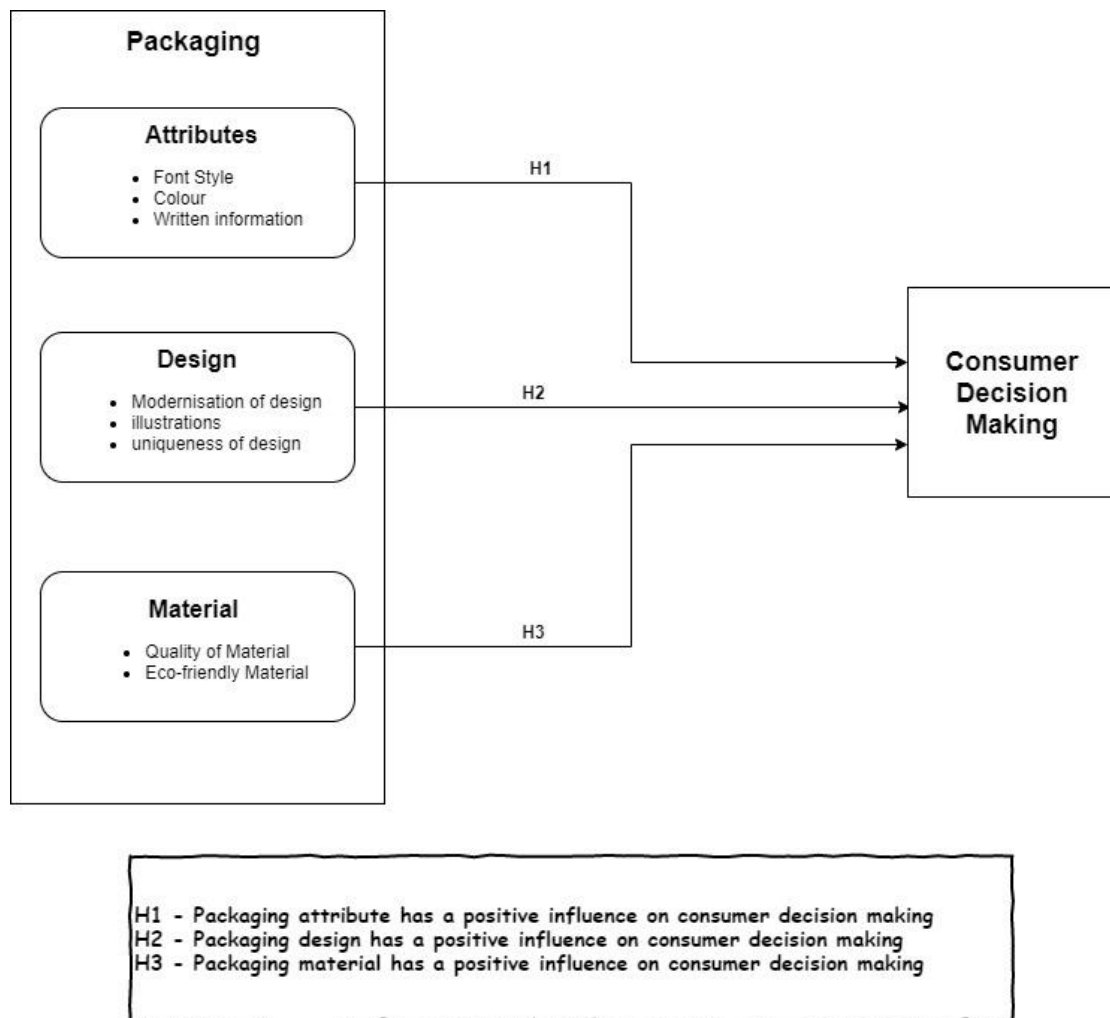


Figure 2.4 : Conceptual framework

## 2.7 Conclusion

This chapter has been divided into three parts, depending on the research questions of this study. The first part reviewed existing literature on the influence of packaging material on consumer decision making. The second part reviewed existing literature on the influence of packaging functionality on consumer decision making,

and the third part reviewed existing literature on the influence of packaging design on consumer decision making. The next chapter, which is chapter three, will discuss the research methodology. It will specifically discuss the research design, the population and sampling design, the data collection methods, research procedures, and data analysis methods.



## CHAPTER 3

### RESEARCH METHODOLOGY

This section of the research emphasizes on explaining the research methodology methods and provides detail explanations of research methods, and the chapter review the different research methods and stated the supporting literature. The second part of the chapter states the research method used by the researcher and the chapter is structured as follow.

#### 3.1 Introduction

#### 3.2 Research philosophy

##### 3.2.1 Inductive reasoning

##### 3.2.2 Deductive reasoning

#### 3.3 Research approach

##### 3.3.1 Quantitative approach

##### 3.3.2 Qualitative approach

#### 3.4 Research design

##### 3.4.1 Research Question

#### 3.5 Primary research data and Secondary research data

##### 3.5.1 Primary research data

##### 3.5.2 Secondary research data

#### 3.6 Quality of Research

##### 3.6.1 Validity

### 3.6.1.1 Cronbach Alpha

### 3.6.2 Reliability

### 3.6.3 Descriptive Analysis

### 3.6.4 Regression Analysis

## 3.7 Method Employed in this Research

### 3.7.1 Method

### 3.7.2 Data Collection instrument

### 3.7.3 Population and Sample

#### 3.7.3.1 Population

#### 3.7.3.2 Pilot Study

#### 3.7.3.3 Sampling Technique

#### 3.7.3.4 Sample Size

## 3.8 Questionnaire

### 3.8.1 Expected Response rate

## 3.9 Conclusion



### 3.1 Introduction

This research is conducted to evaluate the research topic, "Influence of Sports Product Packaging on Consumer Decision Making at MTG Fight gear". The research focuses on an assist in evaluating the impact of packing of on consumer decision making in term packing attributes, packaging design and packaging material in MTG Bangkok, Thailand. Hence, the study emphasizes finding the tool through which consumers trust the packaging material before making a purchase and present the attitude toward purchasing the product.

Therefore, the research method used to understand the different consumers view about the packaging and how it influences their decision making. Therefore, the researcher intends to define the research method first and justified the selection of the research method used in the research.

### 3.2 Research Philosophy

The principle of thesis research is to recognise the foundation of the research, research framework, as well as method technique to positively accomplish the thesis research study (Bynner & Stribley, 2010; Nicholls, 2019). The research philosophy is conducted to give solution to the problems and questions, to fulfil the intentions of the thesis research (Zikmund, 2000). And so, the research's framework plays an essential part in representing the outlook as well as the point to understand the research validity (Cohen, Manion, & Morrison, 2007; E. Takyi, 2015). Easterby-Smith, Thorpe & Lowe (2002) highlighted three reasons that indicate the importance of the research philosophy in thesis research. They began by explaining that the research philosophy supports simplifying the research strategy to make it more transparent. Next, they

discussed that the research philosophy would assist in building and categorising the research strategies. Lastly, they believe that the positions on which the research paper strategy work will get acknowledged in the research philosophy. Trochim (2000) explained that formerly, the contemporary principles in writing research developed, rational thinking used to be the description for the concept of what theorists used to address research writing. The two main coherent methods that are related to contemporary research writing as applied by Trochim (2000) are the inductive and deductive reasoning approach.

### 3.2.1 Inductive reasoning

According to Goddard & Melville (2004), the inductive approach can also be called inductive reasoning; it begins with the investigations and hypothesis are then projected as an outcome of investigations headed for the concluding progression of the research. As constructed by Sanders, Lewis & Thronhill (2012), this kind of reasoning does not stop the researcher from adopting current philosophies to frame the analysed research questions. Nonetheless, the purpose of the inductive approach is to use the gathered data set to produce the researchers' intention to recognize the outlines and the associations of the research. It is to construct a principle that set on the knowledge which retrieved from experience capability (Sanders, Lewis & Thronhill, 2012; Børve, Rolstadås, Andersen, & Aarseth, 2017). The figure below represents the steps of how inductive reasoning works.

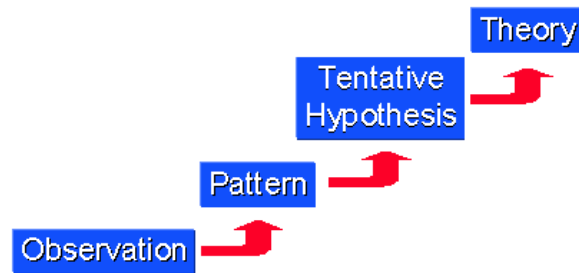


Figure 3.1: Inductive reasoning adopted from Trochim (2000).

### 3.2.2 Deductive reasoning

Trochim (2000) gave details on a deductive approach that it operates more definite from a more common. Wilson (2010) explained that a deductive approach is implicated with planning a research approach to examine the theory after establishing a theory grounded on obtainable philosophy. Babbie (2010) suggested that the deductive approach starts with a predicted table outline that is examined in contrast to investigations. Gulati (2009) suggested that if an underlying association seems to be inferred by a specific principle, the deductive approach could examine to conclude whether the particular connection did attain more universal conditions. The figure below represents the steps of how deductive reasoning works.

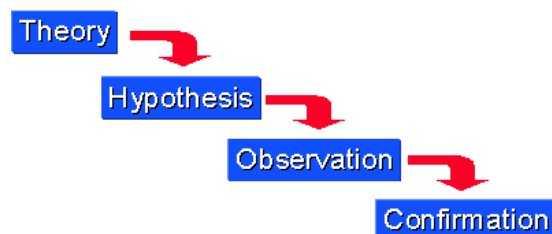


Figure 3.2: deductive reasoning adopted from Trochim (2000).

### 3.3 Research Approach

Denzin & Lincoln (1994), mentioned that qualitative and quantitative methods are the two varieties of research approaches to use when gathering relevant research data and these approaches have both strong point and weak points. Dow (2002), mentioned that the most suitable approach the researcher should use would rest on the aim of the researcher, the intention of the research study, the applicable data or other issues that may occur during the research process.

#### 3.3.1 Qualitative method

According to Burns & Grove (2003), the qualitative approach is an organized, intuitive technique employed to explain and give significance to experiences as well as positions in life. Yin (1994) further explains the materials that are supposed to be explored, meaning and identifying the circumstances through other individual's point of view, for those researches the using of the qualitative approach is relevant. According to Parahoo (1997), the qualitative approach with focuses on the individuality and pays attention to respondent's understanding and background. Therefore, the qualitative approach practice of a collective inspection that concentrates on the way respondents understand and correspond to their environment and the world they are living in (Holloway & Wheeler, 2002).

#### 3.3.2 Quantitative method

Bryman (2012) clarified the quantitative method as strategies for research that highlights on the figures to bring together data and calculate it. Burns (2000) explained that the quantitative method permanently is associated with an analytical approach and the role of a quantitative method is to demonstrate the

association concerning changeable information such as reasoning, assertiveness, and figures. On the other hand, Creswell (2007) explained that quantitative research technique is considered to explain, measure and define the research finding. Though, quantitative research technique is utilized in the study to acknowledge the perspective of the expert researcher. By which, the researcher conducts a study associated with investigating and examining the influence of product packaging and consumer decision making and create a hypothesis to evaluate the outcome of the study. Hence, the researcher finds the quantitative method technique to be well-suitable tools to explain the influence of product packaging and consumer decision making. Hence, the researcher requires survey questionnaire tools to understand the influence of product packaging and consumer decision making. However, few of the respondents do not respond to question, the way they should. It might be because of difficulty in question. Therefore, the study comes with an idea to understand the fact behind the study (Wilson & Collins, 2010).

The Table below represents the difference between a qualitative and a quantitative research method:

Table 3.1 : Qualitative and Quantitative research method taken from Pierce (2008, p.43)

<b>Characteristics</b>	<b>Quantitative Research</b>	<b>Qualitative Research</b>
<b>Origins</b>	Natural Science	Social Science
<b>Philosophic roots</b>	Positivism	Naturalism, feminism
<b>Research Design</b>	Deductive; Systematic	Inductive; Flexible

(Continued)

Table 3.1 (Continued) : Qualitative and Quantitative research method taken from

Pierce (2008, p.43)

<b>Characteristics</b>	<b>Quantitative Research</b>	<b>Qualitative Research</b>
<b>Contribution to theory</b>	Theory testing; Seek explanation and universal laws	Theory building; Seek explanation and solution
<b>Researcher</b>	Observer, outsider	Participants, insider
<b>Researcher's attitude</b>	Objective	Subjective, empathetic
<b>People are regarded as</b>	Objects	Subjects
<b>Samples or cases</b>	Random; Large; Focus on universes	Non-random; Small; Focus on minorities
<b>Focus</b>	The individual	The group ( Family, clan..peer)
<b>Records</b>	Frequency	Social meanings
<b>Data</b>	Numeric concept indicators	Non-numeric concepts
<b>Data Collection</b>	Survey and structured questionnaire	Personal interviews and unstructured interviews
<b>Represented by</b>	Tables and charts	Transcripts
<b>Analysis</b>	Statistical	Non-statistical
<b>Generalisability</b>	High	None Claimed
<b>Costs</b>	High	Low
<b>Findings</b>	Nomothetic (General Laws)	Ideographic ( specific to historical and cultural context)

### 3.4 Research Design

Burns & Grove (2003), described to research design as an outline leading the researcher to be able to have their most control on aspects that may affect with the validity of the research's' outcome, as well as acting as a framework for the research paper. The research paper is grasped by an adhesive, so-called research design (Trochim, 2000). An explanation by Parahoo (1997), narrated the research design as a

platform that direct and explained where, when and how the researcher should collect and evaluate the findings for the research study.

### 3.4.1 Research Question(s)

In today's world, brands need to differentiate their products and stand out in the industry. This is the main reason for this research to find out how companies create their brand which differentiates from the others with the help of beneficial packaging. It is safe to say that a consumer gets attracted to the packaging of a product before making a purchase. A wide of brands are available for the same product, but some brands are making more sells with the help of their attractive and informative packaging; this helps companies to have advantages over the other. Therefore, the packaging is one a way to attract them. The reason for investigating what kind of stimulus that works on the packaging is to gain knowledge of consumes preferences.

#### Main Questions

How does sports product packaging influence consumer decision-making?

#### Sub-Question

1. In what ways do the packaging attributes influences consumer decision making?
2. How does packaging material influence the consumer decision-making process?
3. In what ways does the attractiveness of the package design influence consumer decision making?

### 3.5 Primary data and Secondary research data

Bryman & Bell (2007) documented that the collected data method is categorized into two fragments which involve primary research data and secondary research data.

#### 3.5.1 Primary research data

Kothari (2004) suggested that the primary research data have a unique trait as they were gathered anew for the first time. Yin (1994) clarified primary data as being the data that is required to be precisely gathered for a specific user from the respondents. Primary research data involves interpretations, surveys, discussions, and assessments (Yin, 1994).

#### 3.5.2 Secondary research data

Yin (1994) informed that secondary research data is regularly noted as data that are assembled from records that are previously obtained. According to Kothari (2004), the secondary research data are those who already have been assembled by other researchers and that it also has already been delivered over an analytical procedure.

### 3.6 Quality of Research

#### 3.6.1 Validity

Validity is a tool to understand whether the data is interpreted correctly (Kirk & Miller, 1986). If the collected data is not valid, it creates an issue of internal validity (Robson, 2002). The validity is explained at the extent through which the gathered data measured as it is intended to measure. Validity was related to finding the validity of research study (Saunders et al., 2003).



### 3.6.1.1 Cronbach Alpha

In 1951 Lee Cronbach Alpha developed an internal consistency scale, and this internal consistency is employed in the testing of variable or aids in constructing a scale, which is used to measure the validity of the primary data. According to Auewarakul, Downing, Praditsuwan, & Jaturatamrong (2005), the value of the internal consistency is always in the range of 1 to 0. This scale aids in describing the extent to which all the items in a test is measured with the same concept. Moreover, help in connecting the inter-relatedness of the items within the test. The internal consistency value must be determined before the test is conducted for the research purposes and to ensure the validity of the data. Hence, the reliability estimate shows the amount of measurement error in a test. In simple words, the interpretation of reliability is the correlation of test with itself. Adjusting the correlation and reducing form to 1.00, produces the index of measurement error. For instance, if a test result of 0.80, it means there is 0.36 error variance in the scores. As the estimate of the reliability improves, the score for the error reduces, and the estimated error amount reduces as well. Many researchers agree to the value of Cronbach alpha if it is greater than 0.60 that suggests that the data collected for the primary source is valid and produces a reliable result from data collected in the primary research (Tavakol & Dennick, 2011; Iranmaneerat et al., 2008).

### 3.6.2 Reliability

According to Coakes & Steel (2007), reliability testing aids in evaluating the properties of the scale of measurement and the items that make them up. The process begins with calculates several commonly used measures of scale reliability and give information about the relationship between the individual items on the scale. The main reasons for conducting this process is to determine the extent of the items in research

questionnaires related to each other. Hence, the internal consistency reliability purpose and goal to have the homogeneity of items comprising a measurement scale. To verify the reliability of the research constructs, the internal consistency analysis (Cronbach's alpha), also each factor correlation is used to identify the internal consistency reliability of the proposed constructs. The reliable questionnaire is likely to produce a Cronbach's alpha result greater than or equal to 0.60, as any result over the value of 0.60 is considered a reliable result. Hence, the value within the range of 0.60 and 1 is considered to demonstrate a strong relationship between test elements. On the other hand, the value of less than 0.60, states the questionnaire is not reliable, and the questionnaire is likely to produce an inaccurate result.

Reliability test is conducted to understand how reliable the information on the current study (Merriam, 1998). While executing the study, reliability test is much more important to understand whether the data is reliable or not. Therefore, the consideration of SPSS is to convert the collected data into charts, figure to analyse the data based on the number of participants who take part in the survey questionnaire.

### 3.6.3 Descriptive Analysis

The descriptive statistic aids in providing a simple summary for the sample and the observation that is has been made. The summary is in quantitative nature and provides processed data in statistics form or in visual (graph) (Kaushik & Mathur, 2014). The summary may either form the basis of the initial description of the data, which is part of the extensive statistical analysis and is enough for an investigation. According to (Zikmund, 2003) the descriptive analysis aids in the transformation of the raw data into a form that will make them easy to understand, rearranging,

interpret, manipulating and ordering data to generate descriptive information.

Statistics and scientific methods are processes in which the information is organized, collected, interpreted, analyzed, which is used the description purposes and concluding the research finding.

The descriptive statistic is provided in the form of mean value, mode, median and standard deviation. This is presented in the graph form, which aids in a better understanding of the data. The processed data also provide the groundwork to do the hypothesis testing and another testing for the study. Moreover, in this research, the mean value and standard deviation are used to analyses the finding of the study — the Likert scale of 5 points aids in defining the result and provide space to conduct more test.

#### 3.6.4 Regression Analysis

The core purpose of conducting the regression analysis is to determine the correlations of two or more variable, which have the effect of the cause-effect relation and does aid in predicting the variable relation for the research (Uyanik & Guler, 2013). The researcher is bond to answer the questions in regards to the relationship of the variables, such as does the dependent and independent variable share a relation and if these variable share a relation, what is the power of the relation and if it is possible to make future-oriented predictions regarding the variable (Alpar, 2003). The regression analysis is divided into two categories, such as univariate and multivariate regression analysis (Tabachnick & Fidell, 1996; Buyukozturk, 2002). The univariate regression analysis is used to measure the relation between the independent and dependent variables. According to Buyukozturk (2002) the analysis of the

multivariate assumptions, the standard linear regression, is used to measure the distribution and freedom of internal testing between the independent variable and has no multiple ties between the independent variable. The ANOVA statistics aids in defining the result and testing the variables (Christensen, 1996).

In this study, the simple linear regression is used to analyze the primary data, as the independent variable and dependent variable is measured. A value of 0 (Zero) suggest that there is slight or no relationship, the large positive value suggests a positive value or the other hand, the larger negative value suggest a negative relationship between the variables (packaging attributes, packaging design and packaging material). In this research, the descriptive method is used to analyse, if the three independents variable (packaging attributes, packaging design and packaging material) has a relationship with one dependent variable, the SPSS is employed to create a result, and the linear and mix regression and ANOVA statistics are used to determine the relationship among the factors.

### 3.7 Method Employed in this research

#### 3.7.1 Method

The researcher in this research employs the deductive research method. The research objective is the support by deductive research method, as the study intends to find the relationship between the main factors and subfactors. Therefore, the deductive research methods support the numerical data and present the relationship between the factors. As the research select, the deductive and the quantitative research approach support the deductive methods. Hence, the researcher selected the quantitative research approach to define relationships in numerical form.

### 3.7.2 Data collection

The data collection process a step which explains how the data is being collected out of the total sample size. The data are gathered into two forms, primary data, and secondary data. In which the primary data is the one which is collected while conducting the research study. On the other hand, secondary data are gathered based on secondary data. However, the researcher collects the primary data online and the survey monkey online platform is used in creating a questionnaire to conduct the survey, the questionnaire was generated to understand the influence of sports product packaging on consumer decision-making. The questionnaire is divided into three main sections. Each section helps in finding the information on the relationship between the sub-factors and main factor which influences the research questions.

As the researchers face the limitation in the time and budget, this research uses the simple random technique to collect information related to the study could be gathered to convert the data into output to understand in detail about the relationship and influence of packaging attributes on consumer decision making.

### 3.7.3 Population and Sampling

Defining the population is a crucial stage in drawing the sample for research. According to Veal (2005), the total category of the subject that is the focus of attention in a particular research project. The population is defined as a total organism living in a given area (Kumar, 2008). The sampling design is a subset of the population which is selected for the purpose of the research. For instance, 150 samples out of the 2000 population. According to Babbie (2010), the sample needs to present the element of the population in the most precise way.

### 3.7.3.1 Population

According to the purpose of this study, the target population of this research are current customers of MTG fightgear, Thailand, who prior has experience with MTG products. The total number of customers as per Human Resource data (Retail) – 30000 worldwide (MTG yearly Report, 2019). The data is taken for one year only because of the new packaging for the gloves that were implemented by MTG in 2019. The data provided by MTG is divided into two groups, normal group and supergroup, as shown in figure 3.3; it shows the extract of customers who purchased boxing glove. The normal group consist of customers and members who make one or more purchase during their visit to MTG store, and the supergroup is assigned to members and nonmembers who purchase three or more items per visit to MTG store.

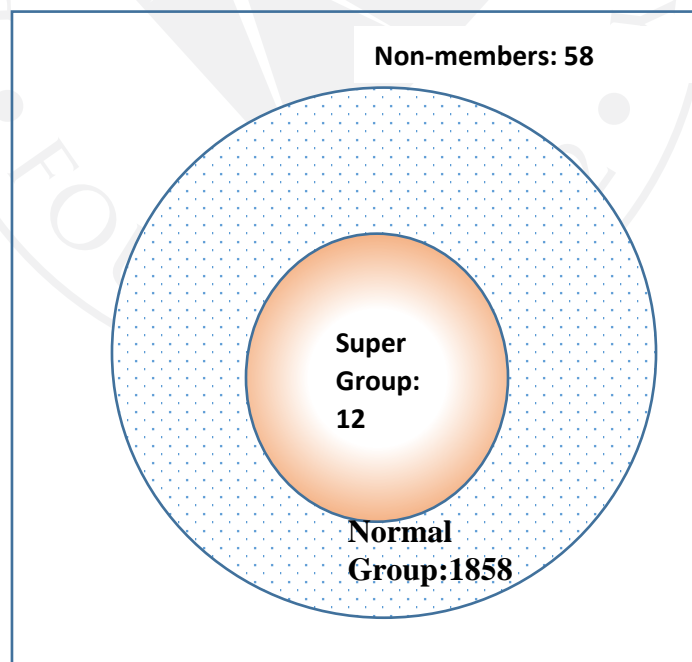


Figure 3.3 : The extraction of customers who purchase boxing gloves.

The research focuses on one product line, Boxing gloves, and MTG Fightgear Thailand has 1928 customers who purchased more than one gloves in the year of 2019; this information was gathered personally from the MTG annual report of 2019. In this research, the population was based on a location resulted from a convenience sampling from current customers of MTG fightgear, Thailand. The population, as mentioned in chapter 1 (section 1.4 scope of the research, p9), and the target population is the current customers of MTG; the non-members are not included in this research. Hence, the target population of the research is 1870. The researcher conducts the pilot study for this research, and the pilot study sample is taken from the target population.

#### 3.7.3.2 Sampling Technique

The research employs a sampling technique to select a sample from the given population. The sampling technique is classified as non-probability and probability (Martin, 1996). According to Malhotra (2002), the probability sampling enhances the researcher to estimate the amount of error of the sample represented toward the population; on the hand, non-probability sampling lacks such a capacity.

There are four categories of probability sampling technique, and as follows; simple random sampling, Systematic, Stratified sampling and Cluster sampling. Simple random sampling even individual have an equal chance to be selected. Systematic sampling needs to find the sampling in the ratio for by dividing the sample required for the population to create subsets of equal proportion and selected sample out from the subset based on the ration. The Stratified sampling divides the population into subsets according to the homogeneity among the unit within a specific subset and heterogeneity between different subsets. The last probability technique is cluster

sampling that subsets are determined by the proximity between the units (Saifuddin, 2009).

To accomplish the research objectives and to answer the research questions, this study adopted the systemic random sampling technique to select the sample. This sampling technique is the most statistically sound, economical, time-efficient, and feasible technique for the researcher. The participants were chosen from the current customer of MTG fightgear from January 2019 to December 2019; that is when the new product packaging was introduced. The survey is sent to the customer of MTG via email and using an online tool, SurveyMonkey, which is most convenient for the customer to access and answer the questionnaire.

#### 3.7.3.3 Pilot Study

The claimed purpose of the pilot study is to test, on a small scale, the steps outlined in a previously-developed research plan, and then based on the results of the pilot, revisions would subsequently be made to the plan (Ackerman & Lohnes, 1981; Brink & Wood, 1983). The result of the pilot study can help identify the actual and potential problems that the researcher can address before beginning the anticipated future study. As described by Prescott & Soeken (1989), a pilot study serves to provide guidance in the development of the research plan instead of being a test of the already-developed plan. The researcher undertakes a pilot in order to evaluate the execution of the methods and feasibility of recruitment, randomization, retention, measurement, and assessment procedures; the implementation of new procedures and interventions (Leon & Kraemer, 2011); refining new and existing tools (Polit & Beck,



2004), or widening or narrowing eligibility criteria for the recruitment of participants (Conn & Wyman, 2010).

A pilot study is performed to test the feasibility of techniques, methods, questionnaires, and how they function together in a context; it can also reveal ethical and practical issues that could hamper the main study (Doody & Doody, 2015). Therefore, pilot studies help researchers identify design flaws, refine data collection and analysis plans; and learn important information about participant burden prior to undertaking the larger study (Prescott & Soeken, 1989; Beebe, 2007). If participants have trouble in completing survey instruments, this may prompt researchers to modify item wording, change the order in which questions are presented, or alter the instrument format (Conn et al., 2010). There is strong support in the literature that pilot studies should be undertaken to identify, and ease risks associated with future study design, sample size, sample selection, data collection, data management, and data analysis (Jairath, Hogerney & Parsons, 2000; Moore, 2011)

The essential part of the pilot study is selecting the sample size, as the researchers in the past and present agree that the sample size of the pilot study needs to be a smaller number. But selecting the correct sample size is critical for the study. The table below, Table 3.2, summarises the different number for the pilot study used by researchers. The researcher chooses the pilot sample size that is most applicable to this study. The study of Sim & Lewis (2011) is about clinical trial and deals with ethical and fair of failure which is high. Hence, a higher sample size for pilot is mentioned in their study. As stated in Hertzog (2007) study, 30–40 per group is preferable if estimating test–retest reliability or item discrimination and data collected

from pilots of this size should be treated as highly tentative. Hence, for the purpose of this study, which is not so ethically or safety driven, researcher chooses the pilot sample of 40.

Table 3.2: Examples of Pilot Study Sample Size from the literature.

Reference	Recommended Pilot Study Sample Size	Comments
Birkett & Day (1994)	20	Suggested 20 for Internal pilot studies.
Hertzog(2007)	30 - 40	Mentions that the use of 30 is commonplace at the time
Kieser & Wassmer (1996)	20 to 40	Use when main trails are between 80 and 250 and using UCL.
Julious (2005)	24	Recommended minimum of 12 subjects per group.
Sim & Lewis (2011)	$\geq 55$	Use for small to medium effect sizes to minimize combined size.

The researcher calculated 33 members from the defined population, as determined in Table 3.3, as the sample size for the pilot study. The pilot sample for each size is rounded up to get a definite number and provide more accuracy to the finding. The sample size of 40 appears to be appropriate for this research, which is beneficial to test the framework, research method and the questionnaire. The researcher conducted the pilot study on 40 participants who were chosen by following systemic sampling process, and an online survey was sent to the members of MTG to answer the questionnaire. As stated by Peat et al. (2002) an important element of the pilot study "*...is that the data are not used to test a hypothesis or included with data from the actual study when the result are reported...*" (p57).

Table 3.3 : Systematic Sampling of Current customers (Members) of MTG fightgear,  
Pilot study.

Gender	Size	Population	% of Gender		Pilot Sample (30)
Female	8oz	100	37.39%	5%	2
	10oz	190		10%	5
	12oz	351		19%	7
	14oz	32		2%	2
	16oz	14		1%	2
Male	8oz	72	62.60%	4%	2
	10oz	199		11%	4
	12oz	527		29%	9
	14oz	260		14%	5
	16oz	92		5%	2
		1870			40

In order to give an equal chance for each participant to get selected, a population datasheet, as shown in appendix 1 (p119), is provided by MTG of the customers who purchased gloves in 2019. The researcher considers the gender biases of the sample during the sampling process. As shown in Table 3.3, above, the total number of Males selected for the pilot sample is 22 and 18 Females are selected.

As mentioned in section 3.7.3.2, p58, the researcher adopts a systematic sampling. Systematic sampling is a type of probability sampling method in which sample members from a larger population are selected according to a random starting

point but with a fixed, periodic interval. This interval, called the sampling interval, is calculated by dividing the population size by the desired sample size. The calculation of the sampling interval for the pilot study is as follow:

$$\text{Sampling Interval}_{\text{Pilot}} = \frac{\text{Total Population}}{\text{Sample size}} = \frac{1870}{33} = 56.66 - \text{and rounded}$$

up to 57.

$$\text{Sampling Interval}_{\text{Main}} = \frac{\text{Total Population}}{\text{Sample size}} = \frac{1870}{329} = 5.68 - \text{and rounded}$$

up to 6.

The researcher rolled two dice, and sum of the result is taken as the starting number. The researcher uses this number to get the starting point for systemic process of sampling. The result of dice was 7, and as shown in Table 3.4, below, researcher counts seven in the first column down and takes the first two numbers as the starting pointing; in this case, it is 07. As the pilot sample interval is 57 and the systemically chosen number was 7; population datasheet shown in appendix 1 (p119), illustrates the participants starting from 7 and using the interval, 57, till 33 participants were systemically chosen.

Table 3.4: Part of a Random number Table (Kendall &amp; Smith, 2018)

Part of a Table of Random Numbers			
61424	20419	86456	00517
90222	27993	04952	66762
50349	71146	97688	86523
85676	10005	8216	25906
02429	19761	15370	43882
907519	61988	40164	15815
070631	88967	19660	89624
89990	78733	16447	27932

The process researcher adopts to connect to the participants of the pilot study is by sending each individual an email with a link that consists of a unique code that will take participants to the online survey, questionnaire. The online survey collected information, such as login and logout time, time is taken to answer each question on the questionnaire, of the participant, member of MTG. Each participant, Male and Female, then rated the clarity of the questions and suggested if the language used was easy to understand or not.

#### 3.7.3.4 Sample Size

Defining the sample size is essential to the research, as the incorrect or smaller number of samples can affect the result of the individual. The sample size selection depends on the research methodology selected by the researcher for their research. As the qualitative research approach emphasizes on explore detail and respondents' knowledge is focused, hence the small sample size is feasible. On the other hand, the

numerical data required larger small sample size to generate the result for the research. Therefore, the quantitative research approach required a larger sample size (Mile & Huberman, 1994; Martin, 1996; Creswell, 2007).

To conduct the sampling, the researcher chose a population of the consumer that purchased equipment in MTG store. The data that was collected by MTG database had many repetitive customers, who were coming more than two times a year. The population was considered for only one year and was further sorted into the type of equipment that a consumer buys and which one sells out most and finding the reason behind it. After analysing the data provided by MTG, it was found that the gloves were purchased most, which is 1928 (MTG yearly Report, 2019). The research only focuses on the current members of MTG, and as mentioned in the population section of this research, p58 is 1870. The sample size of the pilot study, mentioned on p59, is 40 is subtracted from the total population. The new target population is 1830, and according to Cooper & Schindler (2014), the sample size is a small representation of the entire population.

According to Yamane (1973), a formula used to calculate the sample size for this research is a formula of:

$$n = N / (1 + N(e^2))$$

Where  $n$  = sample size,  $N$  = Population size,  $e^2$  = level of precision ( $\pm 5\%$ , or at 95% confidence level).

The sample size calculates method for this research as follows:

$$n = 1830 / (1 + 1830(0.05^2)), \text{ Therefore } n = 328$$

Then, the sample size for this study is 328 respondents

Table 3.5: Systematic Sampling on Current customers (Members) of MTG fightgear,

Main sample

Gender	Size	Populatio n	% of Gender	Main Sample	
Female	8oz	100	37.39%	5%	18
	10oz	190		10%	34
	12oz	351		19%	63
	14oz	32		2%	6
	16oz	14		1%	2
Male	8oz	71	62.60%	4%	13
	10oz	198		11%	36
	12oz	525		29%	95
	14oz	259		14%	46
	16oz	90		5%	16
		1830			328

Calculation:

$$\% \text{ female, Glove purchases} = 687/1830 = 37.39\% \cong 37\%$$

$$\% \text{ male, Glove purchases} = 1143/1830 = 62.60\% \cong 63\%$$

As the sample size of this study is 328 respondents.

$$\text{8oz gloves purchased by Female: } 100 \times (328/1830)$$

10oz gloves purchased by Female: 190 x (328/1830)

12oz gloves purchased by Female: 351 x (328/1830)

14oz gloves purchased by Female: 32 x (328/1830)

16oz gloves purchased by Female: 14 x (328/1830)

8oz gloves purchased by Male: 71 x (328/1830)

10oz gloves purchased by Male: 198 x (328/1830)

12oz gloves purchased by Male: 525 x (328/1830)

14oz gloves purchased by Male: 259 x (328/1830)

16oz gloves purchased by Male: 90 x (328/1830)

As a summary, the adopted sampling process and outcomes can be seen for both the pilot and the main interviews in Table 3.6

Table 3.6 : Systematic Sampling on Current customers (Members) of MTG fightgear.

Gender	Size	Population	% of Gender		Pilot Sample	Main Sample
Female	8oz	100	37.50%	5%	2	18
	10oz	190		10%	5	34
	12oz	351		19%	7	63
	14oz	32		2%	2	6
	16oz	14		1%	2	2
Male	8oz	71	62.50%	4%	2	13
	10oz	198		11%	4	36
	12oz	525		29%	9	95
	14oz	259		14%	5	46
	16oz	90		5%	2	16
		1837			40	328



The researcher adopted the same, systematic sampling, method to select the responded to answer the questionnaire. The researcher threw dices and the sum of outcome to get a number which was used on Table 3.4 (p62) to pick a number which will be the starting point of selecting process, using the population datasheet in appendix 1 (p119). The interval is 6 (p62), and the researcher systematically choose 328 respondents (Table 3.6), 205 Male and 123 Females (p65), from the population sheet provided by MTG.

### 3.8 Questionnaire

The research design formulating depends on the form of questionnaire design and is an important step in research design. Malhotra (2004) states that the questionnaire is a formalized set of questions for obtaining information from respondents. The questionnaire is divided into three specific objectives. First, the questions must be designed in a manner which translated the meaning in the questions asked and design to give desirable result. Secondly, the word and language should motivate the respondents to answers the questions. Finally, the questionnaire design should have minimized response error (Malhotra, 2004).

The intention of the questionnaire is to answer the research questions, as mentioned in section 3.4.1 research question (p49) of this research. The questionnaire for this research is divided into five sections.

The first section of the questionnaire consists of five questions, and the response of participants will provide the general information such as, age and gender of the respondent.

The second section of the questionnaire consists of 9 questions, and the response of participants will determine the research question 1 (section 3.4.1 research question, p49). The questions in this section are close-end questions, and 5-point Likert scale is implemented. To further analyze the result of the mean score of the result from Likert scale will be taken and the researcher will take the sum of the items, divide it by the number of items, and then round to the nearest whole number.

The mean score will/is characterized as follow:

- 0.01 to 1.00 is (strongly disagree);
- 1.01 to 2.00 is (disagree);
- 2.01 to 3.00 is (neutral);
- 3.01 to 4:00 is (agree);
- 4.01 to 5.00 is (strongly agree)

The data collected from this section will help support the Hypothesis (H1) mentioned in section 2.6 conceptual framework (p39) of the research. The questions in this section is designed with the help of past researches in similar field, as reference and planned the questions according to Polyakova (2013) findings. The researcher intends to find the relationship between the depended and independent variables.

The third section of the questionnaire focuses on packaging material and the sub-factors, such as quality of material and eco-friendly material, which has an influence on consumer decision making. The third section of the questionnaire consists of 8 questions, and the data collected from this section will help the researcher to analysis research question 2 (section 3.4.1 research question, p49). They will support hypotheses (H2) of the research (section 2.6, conceptual framework,

p39). This section of the research also implements the 5-point Likert scale. The questions in this section are designed with the help of previous research, in similar field, as reference and designed the questions according to Mubin (2016) findings.

The fourth section of the questionnaire focuses on the design of the packaging and the data collected from this section will help the researcher understand the third and final research question (section 3.4.1 research question, p49). This section consist of 9 questions and will help support the hypothesis of the research (H3) as mentioned in section 2.6, conceptual framework, p39) and 5-point Likert scale is implemented. The questions in this section is designed with the help of previous research, in similar field, as reference.

The last section of the questionnaire focuses on consumer decision making process and it consists of 9 questions. The researcher took Polyakova (2013) research as basis to design questions for this section.

The researcher intends to find the Sum, Mean and value of standard deviation of the variables in this section using Descriptive analysis. All values of mean will show the central tendencies of each variable and values of standard deviation, minimum and maximum will show the dispersion of values from its mean (Mubin, 2016). The researcher intends to find the relationship between the depended and independent variables. The zero (0) value will mean there is no relationship or the larger the value means a positive relationship. The outcome will help researcher understand the relationship between the variable with the help of regression analysis.

The researcher considers, as mentioned above, all the sections of the questionnaire to be critical and incomplete response can influence the outcome. As

mentioned of p62 of the research, the researcher will send a unique link to each member and the survey will be conducted with the help of SurveyMonkey. The critical questions of the questionnaire will be marked with an asterisk symbol indicating the importance of the question. A respondent will not be allowed to move on to the next question of the questionnaire; if the asterisk marked, the question is not answered. This will help to eliminate the possibility of an incomplete questionnaire, which can/will affect the outcome of the research. An email will be sent to the members who are systematically chosen using systematic sampling (section 3.7.3.2 sampling technique, p58) before the survey; this will prepare the respondents for the upcoming survey. Another reminder will be sent to the selected respondents two days before the email with a unique link. This will prevent the email from falling into a spam folder and reduce the chances of non-response due to missed link.

### 3.8.1 Expected Response Rate

The researchers for over a decade argue about the correct response rate of the research but also agrees that the response rate is an important and crucial part of research finding (Schalm & Kelloway, 2001). Hence, collecting the data from non-random group differs from the population in term of the variable of interest. Therefore, for a systematic random sampling technique, the response rate is an important element to consider. There are two elements which affect the response rate. First, the failure to deliver questionnaires to the target population and the second reason, the reluctance of the respondent to answer (Baruch, 1999). The Table below represents the detailed information about the response rate, as mentioned in Nulty (2008) study.

Table 3.7 : The Response Rate, Paper vs Online surveys (Nulty, 2008)

Who	Paper-based response rate	Online response rate	Difference (%)
Cook et al. (2000)	55.6	-	-16
Baruch (1999)	-	39.6	
Dommeier et al. (2004)	75	43	-32
Ballantyne (2005)	55	47	-8
Ogier (2005)	65	30	-35
Nair et al. (2005)	56	31	-25
Griffith University (2005)	57	20	-37
Sweep (2006)	56	23	-33
Watt et al. (2002)	32.6	33.3	0.7
Overall	56	33	-23

In this research, the expected response rate is taken as 33%, which is the average response rate from Nulty (2008) research and it is supported by the Watt et al. (2002); the research is on the response rates and among the first researcher to research on the online surveys response rate and still considered accurate by many researchers (Nulty, 2008). The expected response to an online survey for this research is taken as 33%, which means the researcher expects at least 109 complete questionnaires. According to Stutely (2003), a minimum number of 30 responses is required for statistical relevance associated with the analysis to provide a useful result within the survey.

### 3.9 Conclusion

This chapter explains the overview of research methodology and research processes. Malhotra (2004) defined that research process is the systemic and objective identification, collection, analysis, dissemination, and use of information for the purpose of improving decision making related to the identification and solution of problems and opportunities in marketing. It is the function that links the consumer,

customers, and public to the marketer. The systematic planning is required all stages of the marketing research process.

Research process is consisting of six steps that define the tasks to be accomplished in conducting a marketing research study. These include problem definition; establish research objectives, research design formulation, collect data, analysis data and report preparation and presentation (Aaker et al., 1998; Malhotra, 2004). Marketing research must have clear objectives and definite designs.

A research design is a framework or blueprint for conducting the marketing research project. It specifies the details of how the project should be conducted. Research design may be broadly classified as exploratory, conclusive and descriptive research. The primary purpose of exploratory research is to provide insights into the problem. Conclusive research is conducted to test specific hypotheses and examine specific relationships. The major objective of descriptive research is to describe market characteristics or functions. A descriptive design requires a clear specification of who, what, when, where, why, and way of research.

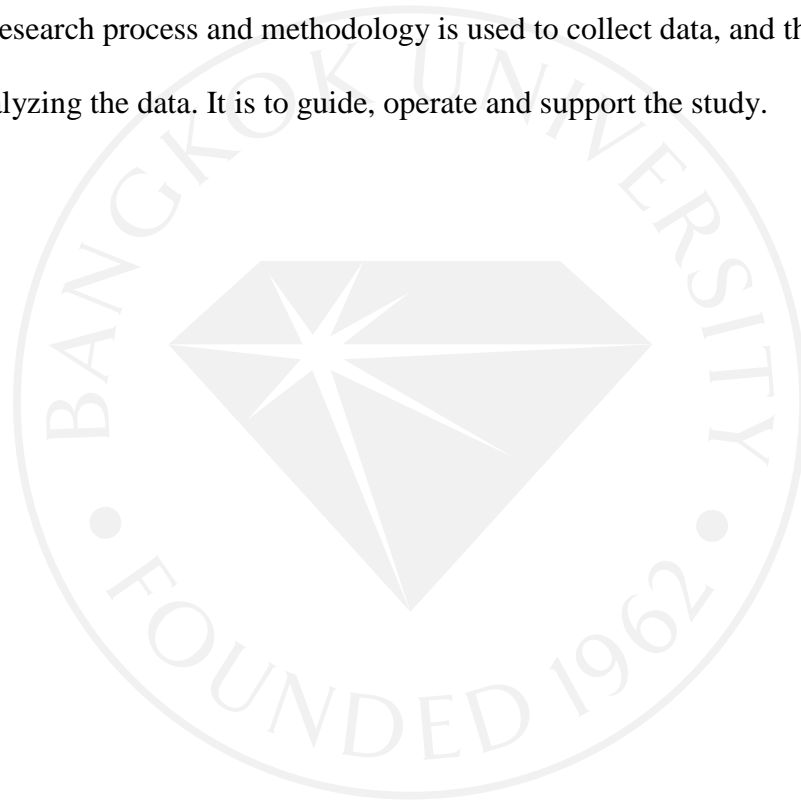
As with most steps in the research process, the design of the questionnaire is highly iterative. Because it is an integral part of the research design, the objective is to seek consistency with other elements of the design, notably the research purpose, the budget, and the methods of analysis. Additional constraints are imposed by the data collection method and the respondent's ability and willingness to answer questions about the subject.

The two basic means of obtaining primary quantitative data in descriptive research are survey and observation. Survey involves the direct questioning of respondents, whereas observation entails recording respondent behavior. Surveys

involve the administration of questionnaire and may be classified, based on the method or mode of administration.

A sample statistics is used to estimate the population characteristics. The sample statistic will have a variance, and this will be a measure of its reliability. The estimate, based on the sample statistic, has an interval associated with it that reflects its variance and the confident level of the researcher.

These research process and methodology is used to collect data, and then gathering and analyzing the data. It is to guide, operate and support the study.



## CHAPTER 4

### DATA PRESENTATION

#### Introduction

This Chapter presents the data collected from 195 respondents. The respondent as mentioned in chapter 3, are the current members of MTG Fightgear. This makes the 60% of the sample. The first section describes the demography of the respondents and the general questions in regards to packaging. The second section looks into the result of the first factor: “packaging attributes” which is further divided into 3 subfactors, font style, colour and written information. The third section presents the result of the second factor: “package material” which embeds of quality of the material and eco-friendly material. The fourth section looks into the result of the third factor: “package design” which embeds of modernization of design, illustration and uniqueness of the design. The last sections looks into the result of the consumer decision making.

4.1 Database on the Customer’s Demographic Characteristics

4.2 Reliability Test

4.3 Date Presentation of first factor, Packaging attributes such as font style, colour and written information

4.4 Date Presentation of second factor, Packaging material such as quality of material and eco-friendly material.

4.5 Date Presentation of third factor, Package design such as modernization of design, illustration and uniqueness of the design

4.6 Regression analysis.



## 4.7 Conclusion

### 4.1 Data base on the Customer's Demographic Characteristics.

The researcher uses descriptive statistics to analyze the demographic characteristics of the respondents. The tables below highlight the breakdown of data according to gender, age and general questions in regards to packaging.

Table 4.1.1: Number and Percentage of Respondents by Gender

Gender

	Number of respondents	Percent	Valid Percent	Cumulative Percent
Valid male	127	65.1	65.1	65.1
female	68	34.9	34.9	100.0
Total	195	100.0	100.0	

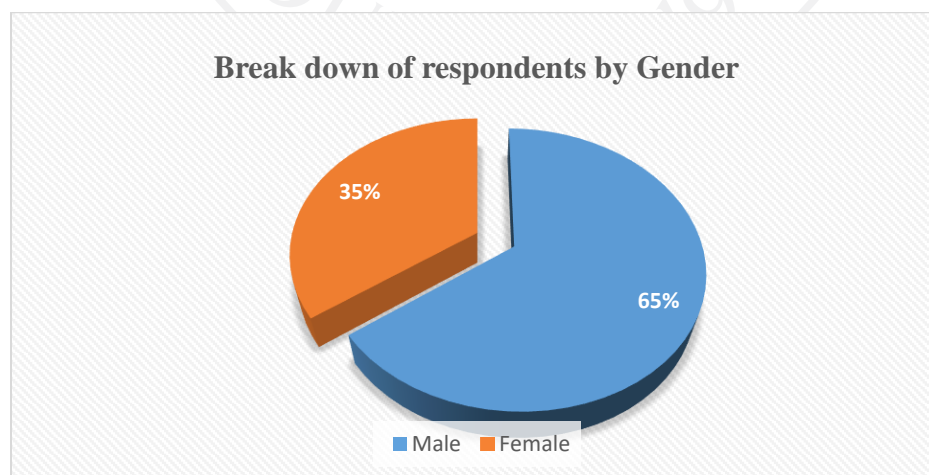


Figure 4.1.1: Gender Distribution Chart

Table 4.1.1 and Figure 4.1.1 present the respondents' Gender data. According to the data collected, 65% of the respondents are Male and 35% of the respondents' are Female.

Table 4.1.2: Age Distribution of Respondents

Age

	Frequency	Percent	Valid Percent	Cumulative Percent
>20	49	25.1	25.1	25.1
20-25	44	22.6	22.6	47.7
Valid 26-30	50	25.6	25.6	73.3
above 30	52	26.7	26.7	100.0
Total	195	100.0	100.0	

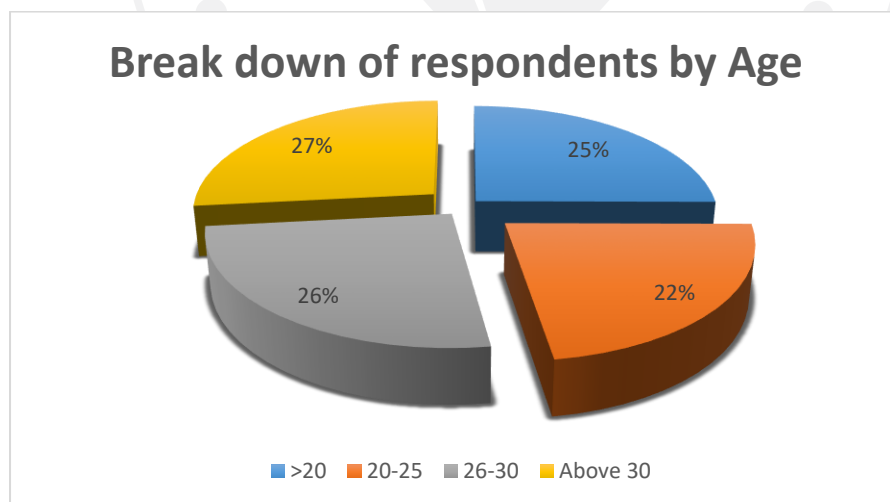


Figure 4.1.2: Age Distribution Chart

Table 4.1.2 and Figure 4.1.2 present the respondents' age data. According to the data collected, 25 % of the respondents are in the age group of below 20 years old.

Those in between 20 to 25 years old attributed to 22% while 26 to 30 years old group is 26 % and above 30 years old is 27 %.

Table 4.1.3: Importance of product packaging distribution of Respondents

Is the packaging of the product important?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	138	70.8	70.8	70.8
	No	57	29.2	29.2	100.0
	Total	195	100.0	100.0	

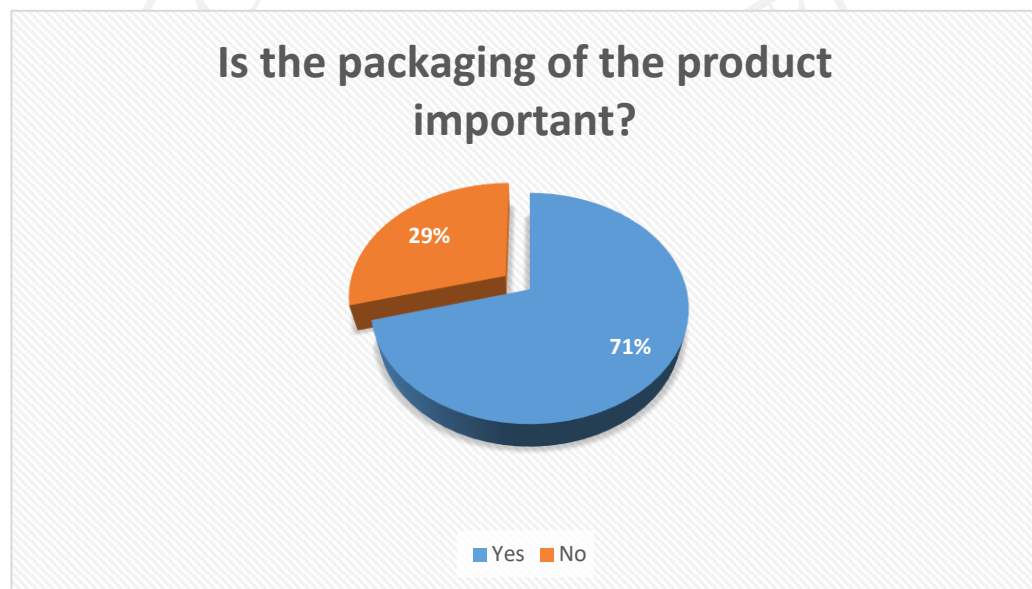


Figure 4.1.3: Distribution chart of General question, Is the packaging of the product important?

Table 4.1.3 and Figure 4.1.3 presents the response of the respondents in regards to the general question, is the packaging of the product important? According to data collected, 71% of the respondents' responded as yes and 29% of the respondents' think that the packaging of the product is not important.

Table 4.1.4: Choice of respondent solely based on appearance of product distribution of Respondents.

Do you choose products based solely on what it looks like?

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	134	68.7	68.7	68.7
	No	61	31.3	31.3	100.0
	Total	195	100.0	100.0	

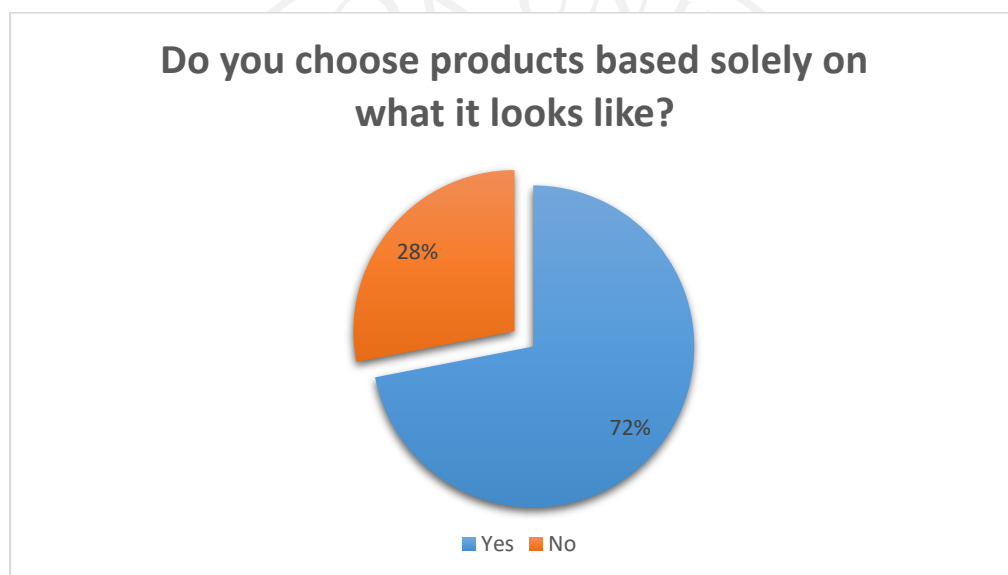


Figure 4.1.4: Distribution chart of General question, do you choose products based solely on what it looks like?

Table 4.1.4 and Figure 4.1.4 presents the response of the respondents in regards to the general question, do you choose products based solely on what it looks like? According to data collected, 72% of the respondents' responded as yes, which means respondents choose product solely based on its appearance whereas 28% of the respondents' disagree.

Table 4.1.5: Influence of product packaging distribution of Respondents.

Does the packaging of a product influence your purchasing decision?

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Yes	161	82.6	82.6	82.6
No	34	17.4	17.4	100.0
Total	195	100.0	100.0	

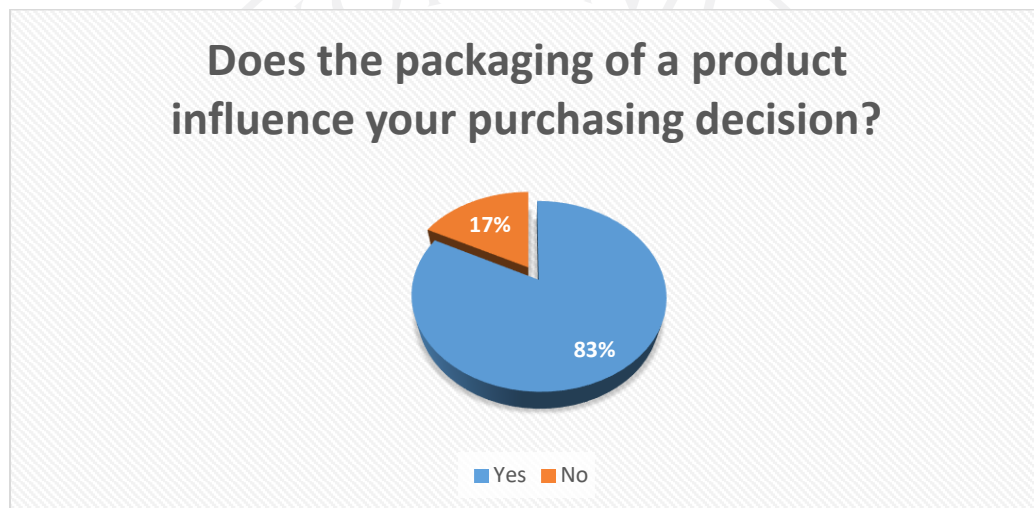


Figure 4.1.5: Distribution chart of General question, Does the packaging of a product influence your purchasing decision?

Table 4.1.5 and Figure 4.1.5 presents the response of the respondents in regards to the general question, Does the packaging of a product influence your purchasing decision? According to data collected, 83% of the respondents' responded as yes, which means respondents purchasing design is influenced by the packaging of the product whereas 17% of the respondents' disagree.

## 4.2 Reliability

Coakes & Steel (2007) defined that reliability analysis evaluates the properties of measurement scales and the items that make them up. The procedure calculates a number of commonly used measures of scale reliability and also provides information about the relationship between individual items in the scale. Reliability analysis can determine the extent of the items in research questionnaires related to each other. Internal consistency reliability is aimed to have the homogeneity of items comprising a measurement scale. To verify the reliability of the research constructs, the internal consistency analysis (Cronbach's alpha) and item-to-total correlation are used to identify the internal consistency reliability of the proposed constructs. Cronbach's alpha is a model of internal consistency based on the average inter-item correction. Cronbach's alpha is suggested to be 0.742 for pilot study and 0.725 for the main. If a scale has a Cronbach's alpha below 0.60, it could be considered for any roots of measurement errors. The item-to-total correlation value is suggested to be equal or greater than 0. The higher inter-item correlation explains that the items of a scale have a strong relationship to the latent construct.

4.3 Date Presentation of first factor, Packaging attributes such as font style, colour and written information.

The basic descriptive data of packaging attributes, font style, colour and written information were presented in Table 4.3.1.

Table 4.3.1: The Result of Frequencies Count for Font style, Colour and Written Information

	N	Minimum	Maximum	Mean	Std. Deviation
Font style	195	2	5	3.80	.698
Colour	195	2	5	3.75	.704
Written information	195	1	5	3.89	.718
Valid N (listwise)	195				

The Table 4.3.1, present the result for sub-topics of packaging attitude.

Majority of the respondents agree that the font style correlate with their decision making. The agreement is observed as the mean value of 3.80 and standard deviation of 0.718. The research concluded from this mean value that font style does influence the consumer decision and this support by the finding of Kuvykaite et al (2009), who suggest that font size is one of main visual attributes when consumer make the decision.

The colour mean value standard at 3.89 and standard deviation 0.718. This result suggests that colour does influence the consumer decision making and support by the finding and statement of White & White (2006) and Mutsikiwa et al (2013).

As per the data collected this study, the written information is important element to influence the consumer decision making. The mean value stand at 3.75 and standard deviation at 0.704, suggesting the written information does influence the consumer decision making and this support by the finding and statement of Silayoi & Speece (2007); Rita (2009) and Rundh (2016).

4.4 Date Presentation of second factor, Packaging material such as quality of material and eco-friendly material.

The basic descriptive data of packaging material, quality of material and eco-friendly material were presented in Table 4.4.1.

Table 4.4.1: The Result of Frequencies Count for quality of material and eco-friendly material.

	N	Minimum	Maximum	Mean	Std. Deviation
Quality of Material	195	1	5	3.62	.829
Eco-friendly Material	195	1	5	3.67	.797
Valid N (listwise)	195				

The table 4.3.1, present the result for sub-topics of package material. Majority of the respondents agree that the package material correlate with their decision making. The quality of the material is observed as the mean value of 3.62 and standard deviation of 0.829. The research concluded from this mean value that the quality of the material does influence the consumer decision and it is supported by the finding of Armstrong (2017) who suggest that quality is important, as it used as the promotional tool for the firm to promote its products which influences consumer decision making.

As per the data collected in this study, the eco-friendly material mean value standard at 3.67 and standard deviation 0.797. This result suggests that eco-friendly



material does influence the consumer decision making and support by the finding and statement of (Zheng, 2012).

4.5 Date Presentation of third factor, Package design such as modernization of design, illustration and uniqueness of the design

The basic descriptive data of package design, modernization of design, illustration and uniqueness of the design were presented in Table 4.5.1.

Table 4.5.1: The Result of Frequencies Count modernization of design, illustration and uniqueness of the design.

	N	Minimum	Maximum	Mean	Std. Deviation
Modernisation	195	2	5	3.92	.575
Illustrations	195	2	5	3.89	.531
Uniqueness	195	2	5	4.10	.537
Valid N (listwise)	195				

The Table 4.5.1, present the result for sub-topics of packaging design.

Majority of the respondents agree that the uniqueness of the design correlate with their decision making. The agreement is observed as the mean value uniqueness of desing is 4.10 and standard deviation of 0.537. The researcher concludes from this mean value that uniqueness of the design does influence the consumer decision and this support by the finding of (Young, 2005), who suggest that uniqueness of design is one of main visual attributes when consumer make the decision.

The modernization of design mean value standard at 3.92 and standard deviation 0.575. This result suggests that modernization of design does influence the consumer decision making and it is supported by the findings of (Rundh, 2013), who suggests that the modern and innovative package design captures consumers attention and plays an important factor in influencing consumer decision.

As per the data collected, the illustrations on design is important element to influence the consumer decision making. The mean value stand at 3.89 and standard deviation at 0.531, suggesting the illustrations does influence the consumer decision making and this support by the finding and statement of (Knight & Glaser, 2005).

#### 4.6 Regression analysis.

The result of the regression analysis is shown in Table 4.6.1 and Table 4.6.2.

Table 4.6.1: ANOVA Table

ANOVA<sup>a</sup>

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	1.767	3	.589	2.054	.108 <sup>b</sup>
Residual	54.765	191	.287		
Total	56.533	194			

a. Dependent Variable: Consumer decision making

b. Predictors: (Constant), Package Design, Package Quality, Packaging Attributes

Table 4.6.2: Coefficients table

Coefficients<sup>a</sup>

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	4.182	.501		8.344	.000
1					
Packging Attributes	.133	.078	.122	1.702	.090
Package Quality	.076	.046	.119	1.659	.099
Package Design	.014	.084	.012	.166	.868

a. Dependent Variable: Consumer decision making

Regression analysis was conducted to test the hypothesis and outcome of it is reflected using three tables of Anova and Coefficient. The Anova table show a sig. value of 0.090 for H1, 0.099 for H2 and 0.868 for H3, which is more than 0.005, hence the alternative hypothesis is rejected. Therefore, the result from the collected sample units, shown the correlation value of 0.133 between the packaging attributes towards the consumer decision making. The positive relationship between the packaging attributes and consumer decision making is supported by the finding of Imiru (2017); Loria (2016); White and White (2016), although the result in this study demonstrate a relationship is towards a weaker side and value proof have a weak positive relationship between two. Therefore, the result from the collected sample units, shown the correlation value of 0.014 between the packaging designs towards the consumer decision making. There is a positive relationship between the packaging design and consumer decision making is supported by the study of Young (2015);

Karedza & Sikwila (2017), although the relationship is towards a weaker side and value proof have a weak positive relationship. Lastly, the result from the collected sample unit, shows the correlation value of 0.076 between the packaging quality towards the consumer decision making. There is a positive relationship between the packaging quality and consumer decision making, and it is supported by Armstrong (2017) and Zheng (2012) findings.

#### 4.7 Conclusion

This chapter presents the questionnaire results from 195 respondents by using SPSS program. It provides detailed outlook of the information gathered by this study. The information enables the researcher to have an overview of the sport product packaging influence on consumer decision making.

The data presentation includes demographic data, data from each factor that influences consumer decision making. The factors such as packaging attributes which has subfactors such as font style, colour and written information; the package material which has quality of material and eco-friendly material as subfactor; the package design which has modernization of design, illustration and uniqueness of design.

The result of the analysis of the data gathered by this study has provided a clear picture of sport product packaging and its positive influence on consumer decision making.

The researcher uses mixed regression analysis on the data collected. The result presents that the purchase making decision is related to all the independent variables. The beta weight of all the factors proves that all of them had a positive statistical significant effect on consumer decision making.

## CHAPTER 5

### CONCLUSION AND DISCUSSION

#### Introduction

This study integrates descriptive analysis, reliability analysis and regression analysis to explain the influence of sport product packaging on consumer decision making. This research investigates the impact of subfactors, such font style, colour, written information, modernization of design, illustration, uniqueness of design, quality of material and eco-friendly material on factors and consumer decision making. In this chapter, the results derived from the data analysis are summarized in the first section. Following is the discussion of the results evaluating the contribution of this study. Next, the implication of this study is described as well. Followed by the section of limitation if this study and finally, recommendations and conclusion to conclude the research.

#### 5.1 Overview

#### 5.2 Research finding

#### 5.3 Implication of this Study

#### 5.4 Limitations of this Study

#### 5.5 Managerial Implication

#### 5.6 Future study

#### 5.7 What I have learned from this Study

#### 5.8 Conclusion

## 5.1 Overview

The purpose of this study was to identify the influence of sport product packaging on consumer decision making. This study explored whether and to what extent these factors influence consumer making purchase decisions. Understanding consumer purchasing behavior is a critical factor in the success of a firm. In the digital marketing era, one of the factors that will make a consumer to select certain products or services is the level of customer expectation and satisfaction before and after sales and services are provided. To carry out the purpose of this study, the following research questions were examined:

Major research question:

How does the sports product packaging influence consumer decision making?

Sub-question development

1. In what ways do the packaging attributes influence consumer decision making?
2. How does packaging material influence consumer decision making process?
3. In what ways does the attractiveness of the package design influence consumer decision making?

In order to answer the research question of this study, the investigation focused on independent variables, one dependent variable, and two demographic and three general questions.

The research design employed a question, non-experimental method approach, using 40 closed-ended questions on survey instruments. Participants rated the questions based on a closed-ended 1-to-5 Likert scale format. The survey was

distributed by the researcher to current members of MTG who purchased one or more glove during the period of 01<sup>st</sup> January 2019 to 31<sup>st</sup> December 2019.

## 5.2 Research Finding

5.2.1 Demographic Characteristics: This research obtained data from 195 respondents. The majority gender of the respondents of this study is male (127) and female (68). The most age range for those respondents in the study was above 30 years old (52). Most of the respondents 138 agreed that packaging of the product is important. The majority of respondents, 134 and 161, responded agreed that they solely choose product based of what it looks like and that packaging of a product influence their purchasing decision.

### 5.2.2 Reliability

Table 5.1: Reliability result

Factor	Items	Cronbach's alpha
Packaging Attributes	9	0.704
Packaging Material	8	0.792
Packaging Design	9	0.706

The Cronbach's alpha score for all the three independent variable is greater than 0.6, suggesting that primary data collected in this research is reliability. The packaging attributes data stand at the Cronbach's alpha value of 0.704, its greater than 0.6 and the result generate from this section of questionnaire is reliable. Packaging design Cronbach's alpha value of 0.706, its greater than 0.6 and the result generate

from section of the questionnaire is reliable. Lastly, the packaging material Cronbach's alpha value of 0.792, its greater than 0.6 and the result generate from this section of the questionnaire is reliable.

### 5.2.3 The packaging attributes on influence consumer decision making.

The collected from the primary suggest that there is a positive relationship between the packaging attributes influence the consumer decision making. The packaging attributes has the sub-topic which are the font style, colour and written information. The data collected present mean value (table 4.2.1), the written information ranked 1<sup>st</sup> in three sub-topic with mean value of 3.89, second place is for the font style with mean value of 3.80 and third place for the colour with mean value of 3.75. Moreover, all sub-topic mean value on the higher, suggesting that the respondents of this research agree with stated question.

The finding of this research (Table referring to table 4.6.1 and 4.6.2) suggest that the packaging attributes and its element does influence the consumer decision and the value (Table 4.6.1 and 4.6.2) suggest a positive relationship between the packaging attributes and consumer decision making. Hence, the consumer does make a purchase due to the element of packaging attributes.

### 5.2.4 Packaging material influence on consumer decision making process?

The collected from the primary suggest that there is a positive relationship between the packaging material influence the consumer decision making. The packaging material has the sub-topic which are the quality of material and eco-friendly material. The data collected present mean value (table 4.3.1), the quality of material ranked 1<sup>st</sup> in two sub-topics with mean value of 3.67, second place is for the



eco-friendly material with mean value of 3.62. Moreover, all sub-topic mean value on the higher, suggesting that the respondents of this research agree with stated question.

The finding of this research (Table referring to table 4.6.1 and 4.6.2) suggest that the packaging material and its element does influence the consumer decision and the value (Table 4.6.1 and 4.6.2) suggest a positive relationship between the packaging material and consumer decision making. Hence, the consumer does make a purchase due to the element of packaging material.

#### 5.2.5 The package design influence on consumer decision making.

The collected from the primary suggest that there is a positive relationship between the packaging design influence the consumer decision making. The packaging design has the sub-topic which are the modernization, illustrations, and uniqueness. The data collected present mean value (table 4.4.1), the uniqueness information ranked 1<sup>st</sup> in three sub-topic with mean value of 4.10, second place is for the font modernization with mean value of 3.92 and third place for the illustrations with mean value of 3.92. Moreover, all sub-topic mean value on the higher, suggesting that the respondents of this research agree with stated question.

The finding of this research (Table referring to table 4.6.1 and 4.6.2) suggest that the packaging design and its element does influence the consumer decision and the value (Table 4.6.1 and 4.6.2) suggest a positive relationship between the packaging design and consumer decision making. Hence, the consumer does make a purchase due to the element of packaging design.

### 5.3 Implication of this Study

The findings of this study offer implications for consumers who are making a strategic purchase, such as purchasing of gloves. The implications for developers' marketers are to understand individual consumer decision making on purchasing a product with packaging that influences their decision making. This knowledge enables the developers' companies to be able to better match their customers' desires with their offer. Given the high level of buyer involvement, e-retailers and marketers should focus on building confidence and satisfaction in their potential and existing customers. It's also helpful for government to understand consumers' attitudes and behaviors from this report so that it can draw up sound policy to protect consumers' interest and control the market.

Quantitative research method has used to collect data which is better to analysis consumers' behavior from quantity so that the report will be more persuasive for future research.

### 5.4 Limitation of the Study

This research study deals with current members of MTG fightgear. This study has few limitations. Firstly, this survey limits us to a pool of Internet users. Hence, the results may not be generalized to non-Internet users. Second, the samples of Internet users for this study were mostly those who are more knowledgeable about the Internet and are thus experienced Internet users. Therefore, the sample of respondents may be skewed toward more experienced Internet users. This may also restrict the generalizability of the findings. Due to limitation of time a systematic random

sampling was done. Also, the sample size is small to be called a true depicter of population as the study was limited to MTG fightgear members.

### 5.5 Managerial implication

For effective packaging and marketing of boxing glove, managers must adhere to certain elements of packaging. According to the results from the research, managers must carefully consider certain key elements of packaging identified by the research which have significant influence on consumers' perception about product. These elements are in two categories, which include visual and informational. The research reveals that visual elements that influence consumers' perception include font style, colour, design, and material. This implies that during the design of a package for glove, managers must carefully consider the size, colour, graphics, shape, and material of the package. This shows that managers must give a higher consideration to the package design when designing the package for gloves. Furthermore, colour is the attractive visual element of glove packaging, therefore managers must consider the appropriate colour when designing a package for glove. Again, certain shapes, graphics, and materials must carefully be considered for the design of glove packaging in order that the package would appeal to and attract consumers, which in turn would translate into successful marketing campaign.

Again, managers must consider the informational elements of packaging during the design of a package for glove. According to the research, information was the most considered element of packaging of glove. This includes material information, environmental concern, brand name, ISO 9002 approval, and place of origin. Therefore, managers must place much emphasis on the informational element

during package design for gloves. The research shows that the environmental concern are the most important informational elements. Managers must place much emphasis on environmental concern during the design of a glove package to boost marketing campaign to improve sales.

### 5.6 Future study

With the nature of this study being purely exploratory and quantitative, the researcher has provided an ideal base of knowledge to support many studies in the future. The results uncovered are broad, meaning that many topic areas are covered, but there is still much room for expansion of knowledge and theory. In addition, the suggested methodology in this study takes an innovative approach at linking consumer behavior theory with packaging communication theory. This methodology can be applied in other contexts, helping researchers to bridge two separate areas.

In terms of research into product attributes, future studies could look into which of the packaging attributes have the most influence in a decision-making process. This study only lists the attributes but future studies could rank them in general or rank them depending on various target consumer groups.

In addition, future studies could look more closely into the relationship between attributes and consumer values. Is there a relationship? Do certain values always lead to a specific purchase decision? Can the correlation between attributes and values really be certain – could it not be influenced by other factors?

Specifically, it would be interesting to conduct a study researching how specific consumer groups respond to product packaging. Although our study uses a consumer group, the results cannot be generalized, and therefore need to be expanded

upon. A quantitative study using a larger quantity of respondents would be useful for marketing managers when looking into how to attract their target consumer.

It would also be interesting to leave the brand names on the package images and conduct a similar quantitative study exploring brand association in relation to values and attributes. Another aspect of product marketing that was absent from this paper but would be helpful for marketers to gather knowledge about is what happens when price is taken into consideration. Do consumers associate different packaging attributes with different price ranges? And how does price tie in with values and attributes? Future studies could investigate consumer ideas surrounding price and use eye-tracking to support their findings.

#### 5.7 What I have learned from this Study

There are many aspects that influence consumer decision making when it comes to the product packaging. Therefore, the researcher did the research from 3 factors, which are further divided into subfactors such as font style, colour, written in formation, modernization of design, illustration, uniqueness of the design, quality of material and eco-friendly material, to figure out what factors influence purchasing behavior.

In this study, the multiple regression analysis was employed to measure the relationship between the independent variables and receptivity to consumer decision making. The score of Beta weight presented that all independent variables had positive statistically significant effect to consumer decision making. Among the factors, the strongest predictors from highest to lowest were packaging attributes, package quality and package design.

## 5.8 Conclusion

Along with high rapid growth of packaging of product, this rapid growth is impressed to many retailers for selling products or services with innovative and unique packaging. The marketing manager should understand the customer behavior in order to make decision to purchase the products or services that can create better marketing strategies (Schiffman & Kanuk, 1977).

For understanding consumer behavior has to lead to diversity theoretical approaches. For this study, the buyer decision factor proposed by Kotler & Armstrong (1997) was adopted. This study believes these factors packaging attributes (font style, colour and written information), package design (modernization of design, illustration and uniqueness of the design), and package quality (quality of material and eco-friendly material) might be suitable to explore and analyze the influence on consumer decision making.

The findings of this study indicated that the 3 critical factors can influence consumer decision making. In this study, the multiple regression analysis was employed to measure the relationship between independent variables and receptivity to consumer decision making. The score of Beta weight presented that all independent variables had positive statistical significant effect to consumer decision making.

Finally, the researcher hopes the results and outcomes of this study might be significant helpful to other researcher. Future researchers should be benefited by understanding or duplicating this research study as the information base in related to further study in identifying other critical factors. This study might contribute not only to a better understanding on what and how strongly the factors are involved in

packaging that influence consumer decision making but also this study provides a standpoint such the effectively manage and recommendations.



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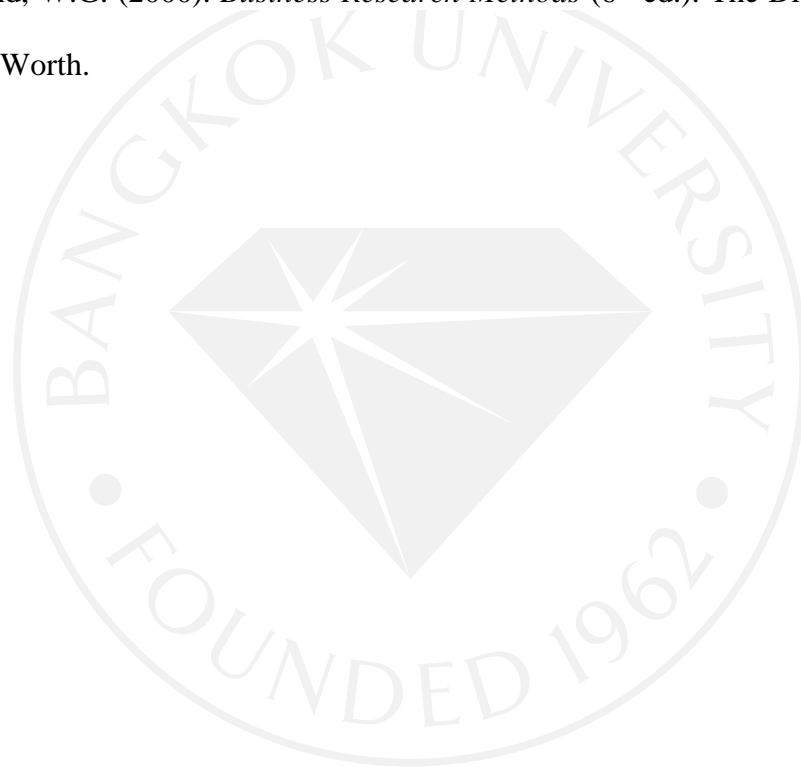
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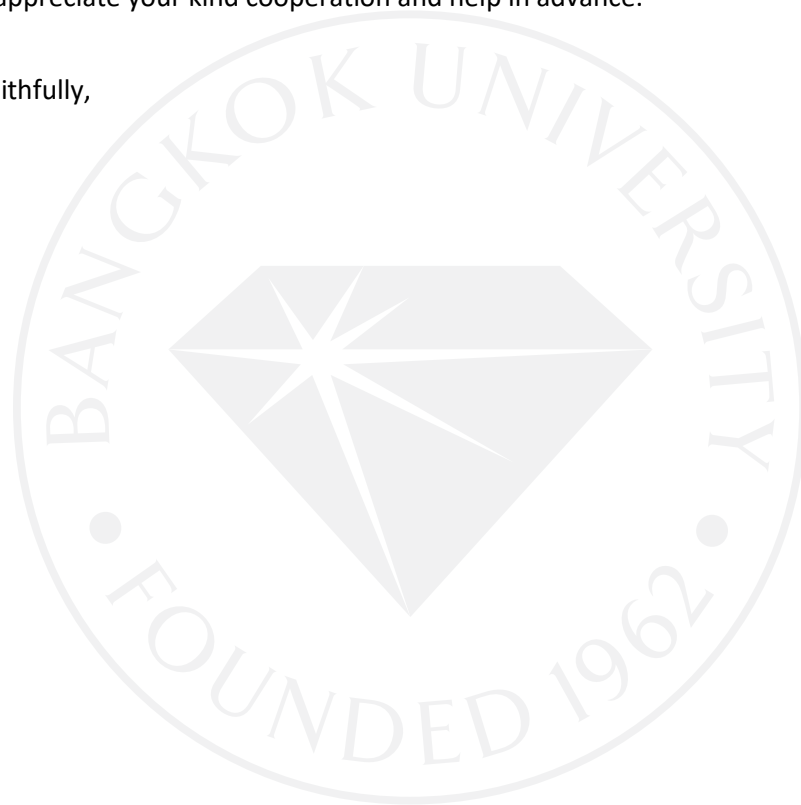
**APPENDIX**

## QUESTIONNAIRE IN ENGLISH VERSION

Dear Respondents :

This is an academic questionnaire to investigate the influences on the online shopping. Your individual information and participation in this survey is totally confidential and will not be disclosed to the public. This questionnaire is very important to the research. Deeply appreciate your kind cooperation and help in advance.

Yours faithfully,



## Questionnaire

The questionnaire present to you in an academic survey, which is requirement for research to complete the research. This questionnaire is aimed at identifying and collecting data about the packaging of a product influencing Consumer purchasing decision. The information collected with the help of this questionnaire is kept confidential to maintain a high level of privacy. The researcher appreciates each member for taking their time in completing the questionnaire.

**Section 1:** This section covers the general questions regarding the demographics of the participants, current members of the MTG.

Based on your experiences please show the levels to which you think below sub factors influence your decision making.

Please check your choice.

1. What is your age?
  - a. >20
  - b. 20-25
  - c. 26-30
  - d. 30<
2. What is your gender?
  - a. Male
  - b. Female
3. Is the packaging of the product important ?
  - a. Yes

- b. No
4. Do you choose products based solely on what it looks like?
- a. Yes
- b. No
5. Does the packaging of a product influence your purchasing decision ?
- a. Yes
- b. No

**Section 2:** This section covers question regarding the first factor, **Packaging attributes**, of the research and how sub factors such as **Font style, Colour** and **Written information**, influence consumer decision making. All the questions in this section are referred and helps researcher understand RQ1, **“In what ways do the packaging attributes influence consumer decision-making?”**

Based on your experiences please show the levels to which you think below.

Please place a (X) to signify your choice

Question	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
1. The size of the font on packaging increase the visual.					

2. The font style on packaging increases the attractiveness of the product.					
3. The packaging visibility improve with as the Font style.					
4. Packaging colour catches your attention.					
5. You would prefer packaging with colour over monotone packaging.					
6. The colour of packaging leaves long lasting impression on you.					
7. The written information on packaging provide insight of product.					
8. The written information on packaging provides information about the product.					
9. The clarity of information printed on packaging provide with information.					



**Section 3:** This section covers question regarding the second factor, **Packaging Material**, of the research and how sub factors such as **quality of material** and **eco-friendly material**, influence consumer decision making. All the questions in this section are referred and helps researcher understand RQ2: **“How does the packaging material influence the consumer decision-making process?”**

Question	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
1. The material used for packaging increases the product's shelf life.					
2. The material used for packaging keeps the product safe during transport.					
3. High quality of the material used for packaging increases the value of gloves.					
4. The material used for packaging, which is ISO9001					

approved, reflect the quality of the packaging material.					
5. The eco-friendly, recyclable, material used for packaging in important.					
6. The harmful chemical used to create package, non-degradable, harm environment.					
7. Green packaging materials, which can be renewed and reusable material, such as, natural paper material, edible packaging materials and biodegradable materials, influences you.					
8. The plastic use on packaging has a negative impact.					

**Section 4:** This section covers question regarding the Third factor, **Packaging design**, of the research and how sub factors such as **Modernisation of design**, **Designs on the illustrations** and **Uniqueness of the design**, influence consumer decision-making. All the questions in this

section are referred and helps researcher understand RQ3: **“In what ways does the attractiveness of the package design influence consumer decision-making?”**

Question	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
1. Modernized packaging gets your attention.					
2. Packaging with innovative concept is important.					
3. You prefer innovative packaging for Gloves then normal poly bag.					
4. The illustrations on package with attractive images and symbols.					
5. The size and limit of illustrations provide limit information.					
6. Clear and visible illustration influence your vision.					

7. Uniqueness of the packaging help you differentiate between MTG Gloves and other.					
8. Unique design with new ideas attracter you.					
9. You prefer new MTG package design comparing to the previous one					

**Section 5:** This section covers question regarding the relationship between packaging and consumer decision making. All the questions in this section are referred and helps researcher understand the relation between packaging and consumer decision making.

Question	Strongly Disagree (1)	Disagree (2)	Neutral (3)	Agree (4)	Strongly Agree (5)
1. Making purchase decisions for Boxing Gloves with packaging is important to me					





2. I feel that packaging is important in making purchase decisions for Boxing Gloves.					
3. I think a lot about my choices when it comes to Boxing Gloves with packaging.					
4. I place great value in making the right decision when it comes to Gloves with packaging.					
5. Purchase decisions for gloves with innovative packaging is are very important to me					
6. Making a purchase decision for Gloves requires a lot of thought when it comes to the packaging material being eco-friendly.					
7. I attach great importance to purchasing Gloves with packaging.					
8. I like being involved in making purchases of Gloves.					

9. The purchase of Gloves is important to me					
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## Population Sheet

<b><u>Total population</u></b>	
Male (63%)	1178
Female (37%)	692
<b><u>Pilot sample</u></b>	
Female	12
Male	21
<b><u>Main Sample</u></b>	
Male	207
Female	122

	Pilot study sample round 1
	Pilot study sample round 2
	main Sample round 1
	main sample round 2

Pilot Random number	Interval for sample
7	57
Main random	Interval for Main sample
13	6

1	101	201	301	401	501	601	701	801	901	1001	1101	1201	1301	1401	1501	1601	1701	1801
2	102	202	302	402	502	602	702	802	902	1002	1102	1202	1302	1402	1502	1602	1702	1802
3	103	203	303	403	503	603	703	803	903	1003	1103	1203	1303	1403	1503	1603	1703	1803
4	104	204	304	404	504	604	704	804	904	1004	1104	1204	1304	1404	1504	1604	1704	1804
5	105	205	305	405	505	605	705	805	905	1005	1105	1205	1305	1405	1505	1605	1705	1805
6	106	206	306	406	506	606	706	806	906	1006	1106	1206	1306	1406	1506	1606	1706	1806
7	107	207	307	407	507	607	707	807	907	1007	1107	1207	1307	1407	1507	1607	1707	1807
8	108	208	308	408	508	608	708	808	908	1008	1108	1208	1308	1408	1508	1608	1708	1808
9	109	209	309	409	509	609	709	809	909	1009	1109	1209	1309	1409	1509	1609	1709	1809
10	110	210	310	410	510	610	710	810	910	1010	1110	1210	1310	1410	1510	1610	1710	1810
11	111	211	311	411	511	611	711	811	911	1011	1111	1211	1311	1411	1511	1611	1711	1811
12	112	212	312	412	512	612	712	812	912	1012	1112	1212	1312	1412	1512	1612	1712	1812
13	113	213	313	413	513	613	713	813	913	1013	1113	1213	1313	1413	1513	1613	1713	1813
14	114	214	314	414	514	614	714	814	914	1014	1114	1214	1314	1414	1514	1614	1714	1814
15	115	215	315	415	515	615	715	815	915	1015	1115	1215	1315	1415	1515	1615	1715	1815
16	116	216	316	416	516	616	716	816	916	1016	1116	1216	1316	1416	1516	1616	1716	1816
17	117	217	317	417	517	617	717	817	917	1017	1117	1217	1317	1417	1517	1617	1717	1817
18	118	218	318	418	518	618	718	818	918	1018	1118	1218	1318	1418	1518	1618	1718	1818
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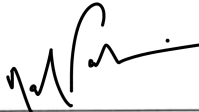
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