A STUDY ON FOOD QUALITY DIMENSIONS OF 3 IN 1 INSTANT PACKET DRINK

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SUPERVISOR'S DECLARATION

I hereby declare that I have checked this thesis and in my opinion, this thesis is adequate in terms of scope and quality for the award of the degree Bachelor of Industrial Technology Management (Hons).

Signature

Name of Supervisor: Dr Fatimah Binti Mahmud

Position:

Date:

STUDENT'S DECLARATION

I hereby declare that the work in this thesis is my own except for quotations and summaries which have been duly acknowledged. The thesis has not been accepted for any degree and is not concurrently submitted for award of other degree.

Signature

Name: Changkari a/p Ravindran

ID Number: PC10021

Date:

Dedicated to my loving parents, Mr RAVINDRAN & Mrs NALLAMMAL

My Beautiful Sisters, GOWRI SHRI & TATCCAYANI

Special dedication for my Loving Late brother KALAYARASU

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ABSTRACT

This thesis is about the food quality dimension of 3 in 1 instant packet drinks. The objective of this thesis is to identify the extent of 3 in 1 instant packet drink usage among the student and to explore the selection criteria of 3 in 1 instant packet drinks based on food quality dimensions. There are five food quality dimensions of 3 in 1 instant packet drinks. The quality dimensions are taste, shelf life, health, price and brand. The sample of this study is students who are living in hostel during their academic period. This thesis can lead to further product development of 3 in 1 instant packet drinks. General view of student toward the 3 in 1 instant packet drink and its quality dimension were analysis and identified by questionnaire. From the result, it seems that most of the student are using the product regularly and they need it because it's easy to prepare and quicker to prepare. It does also can be seen that most of the student are partially satisfied with the current 3 in 1 instant packet drinks. Taste and price is the important food quality dimension for the student to select the 3 in 1 instant packet drink. It can be concluded that the 3 in 1 packet drinks need an improvement and development to give more satisfaction to the customer. Manufacture must focus on the taste to improve its quality as student grade it as an important selection criterion for the 3 in 1 instant packet drink.

ABSTRAK

Tesis ini adalah mengenai dimensi kualiti makanan 3 dalam 1 minuman paket segera. Objektif tesis ini adalah untuk mengenal pasti tahap 3 dalam 1 segera penggunaan minuman paket di kalangan pelajar dan untuk meneroka kriteria pemilihan 3 dalam 1 minuman paket segera berdasarkan dimensi kualiti makanan. Terdapat lima dimensi kualiti makanan 3 dalam 1 minuman paket segera Dimensi kualiti adalah rasa, jangka hayat, kesihatan, harga dan jenama. Sampel kajian ini adalah pelajar-pelajar yang tinggal di asrama dalam tempoh akademik mereka. Tesis ini boleh membawa kepada pembangunan produk lagi 3 dalam 1 minuman paket segera. Pandangan umum pelajar ke arah 3 dalam 1 minuman paket segera dan dimensi kualiti secara analisis dan dikenalpasti oleh soal selidik. Dari keputusan itu, ia seolah-olah bahawa kebanyakan pelajar menggunakan produk secara tetap dan mereka memerlukannya kerana ia mudah disediakan dan lebih cepat untuk menyediakan. Ia juga boleh dilihat bahawa kebanyakan pelajar adalah sebahagiannya berpuas hati dengan 3 dalam 1 minuman paket segera semasa. Rasa dan harga yang penting dimensi kualiti makanan bagi pelajar untuk memilih 3 dalam 1 minuman paket segera. boleh membuat kesimpulan bahawa 3 dalam 1 minuman paket perlu peningkatan dan pembangunan untuk member kepuasan kepada pelanggan. Pembuatan mesti memberi tumpuan kepada rasa untuk meningkatkan kualiti sebagai pelajar gred ia sebagai satu kriteria pemilihan penting bagi 3 dalam 1 minuman paket segera.

CHAPTER 4 DATA ANALYSIS AND DISCUSSION

CHAPTER 5 CONCLUSION AND RECOMMENDATION

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CHAPTER 1

INTRODUCTION

1.1 INTRODUCTION

This chapter begins with the overview of instant drinks. The feature and the possible health risks from consuming these instant drinks have been discussed. Besides that, this chapter includes the background of problem, problem statement, research objective, research questions, scopes of research and limitation. The significance, expected results and framework of the study also been highlighted.

1.2 PROBLEM BACKGROUND

1.2.1 Overview of Instant Drinks

The food-processing sector accounts for about 10% of Malaysia manufacturing output. Processed food are exported to more than 200 countries, with an annual export value of more than RM 11 million which amounts to two-thirds of the total food exports of over 18milions. (MIDA publications). One of the main sectors of food processing is the drinks process industries. There are numberless drinks process industries in Malaysia. Instant beverage powder business becoming one of the leading food segments in food product manufacturing.

Instant drinks are dehydrated coffee that can be made into drinks just by adding hot water. Coffee beans brewed and make into powder form by extraction equipment. Instant drinks come in total package of prefer coffee, sugar and milk. Customers have to only add hot water and in a second they can have their drinks. In this fast moving world,

these types of instant drinks are getting high attention of customers. Customer eager to purchase this instant drinks because it's mainly save time of preparation.

They are lot types of instant drinks in markets nowadays. This product is mainly knows as 3 in 1 drinks or 2 in 1 drinks. 3 in 1 mean that customers can get the mixture of coffee, sugar and milk, all together in one packet. While the 2 in 1 types instant drinks only contain of coffee and milk. Later, customer can add sugar to their preferences.

1.2.2 The Usage and Risk of Instant Drinks

The 3 in 1 instant drink is very famous among the students. Especially among students, those are living in hostel during their academic period tend to use these 3 in 1 instant drinks more likely. Students who are busy with studies and they have no time to make their own drinks. Thus they use these instant drinks to save their time.

The usage of 3 in 1 instant drinks are can be dangerous to student's health because of its higher sugar content. Laziness and time saving attitudes prevent students realised this fact. Since the taste of 3 in 1 bit bitter, customers add more sugar on their own which make the drinks sweeter without their knowledge.

According to a newspaper article by Hidayah and Noor (2006), the 3 in 1 instant drinks believed to have more than three tablespoon sugar in one single packet. They also stated that the function of higher sugar is to cover the bitter taste of the coffee. Besides that, each single pack contains more than 200 calories. These 200 calories of a single   pack equal to two slices of bread or one plate of plain rice. If a person took three packets of 3 in 1 instant drinks per day it's equal to 600calories which can lead to obesity and heart related diseases. All these information are sources from Diabetic Program organised by Pusat Pengajian Sains Kesihatan of University Sains Malaysia.

1.2.3 Food Quality and Customer Perception

Knowing customer's perception on certain product can be the one of the best way to improve the product to gain customer's satisfaction and loyalty. Customer's perception leads to customer's satisfaction and loyalty. Customer perception on product

depends on food quality. Food quality is the quality characteristics of food that acceptable to consumers. Food quality includes external and internal characteristics. Examples of food quality are taste, size health and colour. Food qualities that can be found in instant drinks are taste, shelf life, health dimension. Price and brand of instant drinks also included in food quality (Brunso et all., 2002). This thesis will focus on food quality dimensions of 3 in 1 instant packet drink. Food quality dimension evaluation is based on their own experience by using the product.

1.3   PROBLEM STATEMENT

Food production is an area that has constant customers because food is one of the essential human living factors. Last decades, people grow their own cooking material such as vegetable and cook by them self. This kind of homemade food comes with guaranteed quality and more healthy.   Now, in this fast moving world, most of the food consumed by the public is manufactured in processing plants, produced in restaurants in all types. The food safety is not guaranteed in this type food production.

The 3 in 1 instant drinks contain of higher sugar and can give the negative impact to customer health. The main consumers of 3 in 1 instant packet are people who tend to save time of drinks preparation. It is a question whether the customer realise the fact that these drinks can cause illness to them. Customer evaluate product based on food quality dimension. The food manufacture needs to know the most important dimension to make for improvement on the product.

1.4   RESEARCH OBJECTIVE

The objectives of this research are as follows:

a) To identify the extend of 3 in 1 instant packet drink usage among student
b) To explore the selection criteria of 3 in 1 instant packet drink based on food quality dimension.

1.5   RESEARCH QUESTION

The research questions are:

a) What is the extend of 3 in 1 instant packet drinks usage among student?

b) What is the selection criteria of 3 in 1 instant packet drink based on food quality dimension?

1.6   SCOPES OF RESEARCH

The research will be focused on 3 in 1 instant packet drinks without discussing on the main ingredient or recipes or the ratio of ingredient of food product since those are a manufacture's private and confidential information. This research will focus on student. To be more specific, the study will investigate student who living in the hostel. The questionnaire will be distributed among the students.

1.7   SIGNIFICANCE OF STUDY

These are few significance of this study. This study can form a baseline for instant drink manufacturer for future product improvement research. Instant drink manufacturer can use this knowledge to find out customer's demands and requirements.

1.8   OPERATIONAL DEFINITION

a)3 in 1 Instant packet drinks

- 3 in 1 instant packet drinks is a packet instant beverage which is widely famous in Asia. It' a packet of mixture of instant coffee, non-dairy creamer and sugar.

b) Food Quality Dimension

Food quality dimension is the criteria which customer evaluates the product based on both expected and experienced.

1.9   EXPECTED RESULTS

The expected results for this research that the most important selection criteria based on food quality dimension are the taste and health.

1.10   CONCEPTUAL FRAMEWORK

Figure 1.1 shows the conceptual framework for this research. This research will focus on 3 in 1 instant packet drinks by the view of customer's perception. The

customer's requirements and satisfaction will be based on how customer evaluates the food quality dimension. The awareness of higher sugar content will be evaluated.

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                    ┌─────────────────────────┐
                    │  3 in 1 Instant Packet  │
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                                ▼
        ┌──────────────┬─────────────────────┬──────────────┐
        │              │ Food Quality Dimension │            │
        │     ┌────────┴────────────────────────┐            │
        ▼     ▼                 ▼               ▼             ▼
   ┌────────┬───────────┐  ┌─────────┐    ┌─────────┐  ┌─────────┐
   │ Taste  │ Shelf life│  │ Health  │    │ Price   │  │ Brand   │
   └────────┴───────────┘  └─────────┘    └─────────┘  └─────────┘
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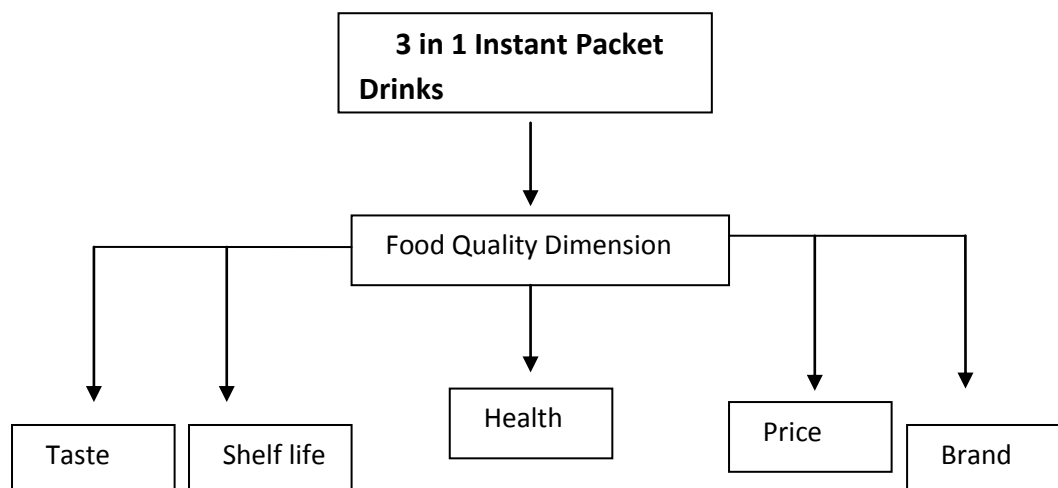
Figure 1.1: Research Conceptual Framework

1.11   OVERALL THESIS STRUCTURE

This thesis consists of five chapters.Chapter 1 provide the initial and base questions for the whole study. The objective of the study has been established. To reach the objective, three research questions have been highlighted. A conceptual framework has be draw to make clear of the whole study.

Chapter 2 provides some past researcher's studies related to the study. This chapter provides collection of past studies related to research questions. This chapter includes the previous study relevant to the hypothesis and the research questions.

Chapter 3 include the methodology used to answer the research questions. This chapter describes the steps taken to reach the objective of this research. The methodology was present in a flow chart and followed by a detail description of each steps.

Chapter 4 present the main findings and of the research relative to the research questions. The findings were analysis based on each research question. The data analysis was presented in a section according to its which research question that the data related. The chapter 5 provides the overall assessments of what the study have found out, how successful it was and suggestions for future research. This chapter conclude the whole research.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

A literature review is one of the research method to review the past research and studies in order to get an idea and concept. Literature review is one of the research mechanisms to go through the previous researches and get more knowledge on our research. The main resources of literature review come in the form of journal, article and books.

This chapter will explain about customer perception of product, customer satisfaction. This study is about instant drinks. This review of instant drinks will start with history of instant drinks. Food quality is the criteria or characteristic enable customer to evaluate to food product. The food quality and its dimension will be discussed in this chapter. These reviews will provide basic for understand and get some understanding about the study and ways to answer the research question.

2.2 CUSTOMER PERCEPTION OF PRODUCT

Perception has been defined as a process of select, arrange and interpret stimuli. These stimuli then will be translate into views. Views of two people will not be same even though there have been in same situation. The whole perception process made up by three stages, the exposure stage, the attention stage and interpretation stage. The brain takes in stimuli in the attention stage and interprets the stimuli, according to our previous experiences and desires, in the interpretation stage. Ultimately, these three stages form our perceptions (Solomon et al., 2006).

When consumers choose among competing products, they face quality and product performance uncertainty. So they are likely to rely on heuristics judge quality across competitive products since consumers have finite time horizons and no incentive to perform through comparative studies prior to purchase (Dawar and Parker, 1994).

The economics and marketing literature have both found that signals serve mostly as heuristics in assessing product quality when there is a need to reduce the perceived risk of purchase, the customer lacks expertise and thus the ability to assess quality(Rao and Monroe 1989)consumer involvement is low(Olson &Celci,1988),objective quality is too complex to assess or the consumer is not in the habit of spending time objectively assessing quality(Allison and Uhl,1964;Hoch and Ha,1986), or there is an information search preference and need for information.

2.3 CUSTOMER SATISFACTION

When a consumer/customer is contented with either the product or services it is termed satisfaction. Satisfaction can also be a person's feelings of pleasure or disappointment that results from comparing a product's perceived performance or outcome with their expectations (Kotler and Keller,2009). Customer satisfaction is defined by one author as the "the consumer's response to the evaluation of the perceived discrepancy between prior expectations and the actual performance of the product or service as perceived after its consumption"(Tse and Peter,1988) hence considering satisfaction as an overall post-purchase evaluation the consumer"(Fornell,1992).Customer satisfaction has also been defined by another as the extent to which a product's perceived performance matches a buyer's expectations(Kotler et al.,2002). According to Schiffman and Karun (2004), customer satisfaction defined as "the individual's perception of the performance of the products or services in relation to his or her expectations" (Schiffman and Karun 2004).

Customer satisfaction could be difficult to measure because it is an attempt to measure human feelings. Thus the simplest way to know how customers feel, and what they want to is by asking them. Levy (2009) in his studies, suggested three ways of measuring customer satisfaction:

a) A survey where customer feedback can be transformed into measurable quantitative data.

b) Focus group or informal where discussions orchestrated by a trained moderator reveal what customers think.

c) Informal measures like reading blogs, talking directly to customers.

There are two types of customer satisfaction; transaction-specific and cumulative (Boulding, et al., 1993; Andeassen, 2000).Transaction-specific types is described as customer evaluation of single experience with a product or service-therefore how happy the customer is with the offering at given point of time, during concrete transaction. Its refers to satisfaction as the evaluation of single transaction.Cumulative customer satisfaction is an overall evaluation based on the total purchase and consumption experiences with a product or service over time (Fornell, 1992).

2.4   HISTORY OF INSTANT COFFEE

In 1901, just-add-hot water "instant" coffee was invented by Japanese American chemist Satori Kato of Chicago. In 1906, English Chemist George Constant Washington invented the first mass produced instant coffee. Washington was living in Guatemala and at the time when he observed dried coffee on his coffee carafe, after experimenting he created' Red E Coffee' the brand name for his instant coffee first marketed in 1909. In 1938, Nescafe or freeze-dried coffee was invented.

2.5   FOOD QUALITY

There are particular four types of food quality (Brunso et.al, 2002). Figure 2.1 shows the four types of quality. The distinction between objective and subjective quality importance when discussing the perception of food quality from a consumer point of view. The four types of food quality are product oriented quality, process oriented quality, quality control and user-oriented quality.

According to them product-oriented quality covers all the aspects of the physical product that together give a precise description of the specific food product. Examples of product quality are sugar content, fat percentage, and alcohol strength of beer. Process-oriented quality covers the ways the food product has been produced. Descriptions based on these aspects provide information about the procedure used to

make the product, and these aspects not necessarily have any effect on the product's physical properties. The third quality type is quality control, which we define as the standards a product has to meet in order to be approved for specific quality class. The last one, user-oriented quality is subjective quality perception form a user point of view; a user can be the end user or an intermediate user in the food chain.
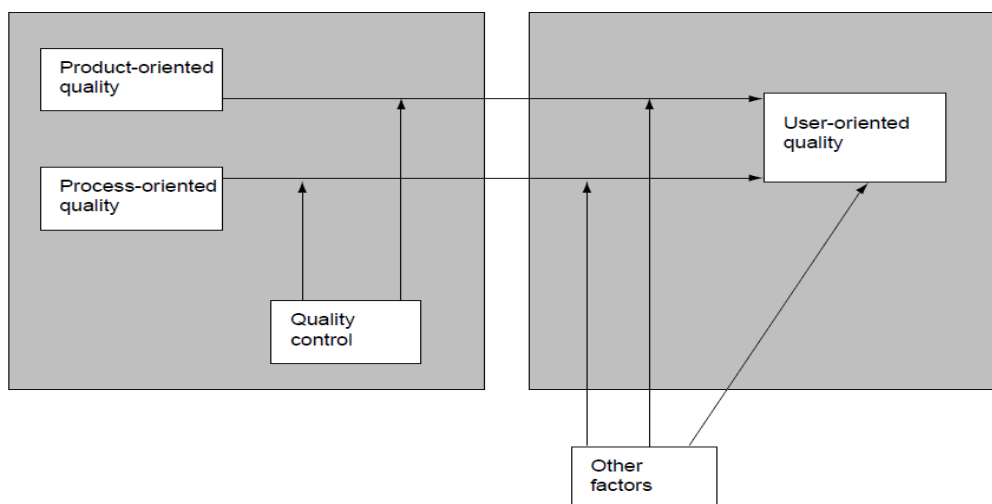
Figure 2.1: Types of Quality

Source: Brunso.et al (2002)

There have been three main streams of research on food quality and safety, dealing with consumer demand for quality and safety, provision of quality and safety, and consumer perception of quality and safety. The relationship between the three is illustrated in Figure 2.2.
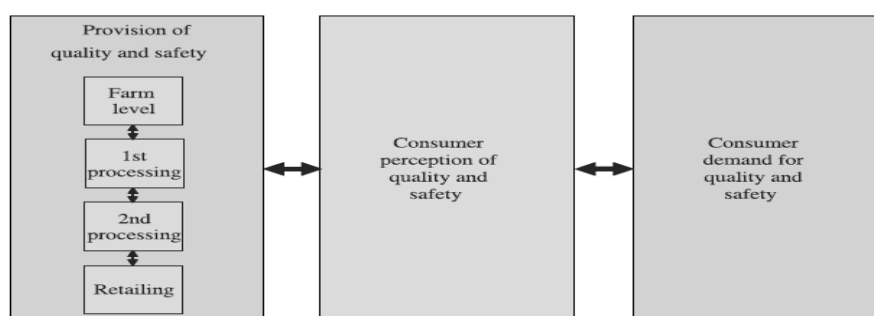
Figure 2.2 Researches on Food Quality and Safety

Source: Klaus. G (2005)

2.6   The Total Food Quality Model

The Total Food Quality Model (Total Food Quality Model), originally proposed by Grunert, Larsen, Madsen and Baadsgaard (1996). The Total Food Quality Model integrates the multi-attributes and the hierarchical approaches to quality perception. The Total Food Quality Model distinguishes the 'before' and 'after' purchase evaluations. Figure 2.3 shows the model of Total Food Quality.

In the before purchase part, the model shows how the quality expectations are formed based on information used to form expectations. There are two types of cues; the intrinsic and extrinsic cues. The intrinsic covers the physical characteristics of the product which can be measured objectively. The extrinsic quality includes all other characteristics such as price, brand, outlet and packaging. Label and its information are the extrinsic cues which generate expectations about the product.

After purchase the product, the consumer will experienced the quality experiences. The quality experience is influenced by many factors such as sensory characteristics, taste and also the way the food is prepared. Typically, customer experience quality expectation before the purchase and quality experiences after the purchase. The relationship between these two is believed to determine product satisfaction and it will determine the probability of purchase the product the next time.

The first contingency relates to the point in the purchase decision and consumption process at which quality decision and consumption process at which quality evaluation occurs. Consumers may evaluate quality at the point of purchase (buying a beverage) or at the point of consumption (drinking a beverage) (Zeithaml, 1988).

The Total Food Quality Model has two dimensions; a horizontal and a vertical dimension. We can analysis food quality perception by these dimensions. The horizontal dimension is a time dimension: it distinguishes quality perception before and after purchase. It takes up the well-known distinction between search, experience and credence qualities and its implication for consumer's ability to assess quality before the purchase, after the purchase , or not at all, and the implications this has for the basis on which consumers will infer quality given information to hand. It also integrates research on consumer satisfaction and dissatisfaction, which rests on the basic assumption that

the extent of confirmation or disconfirmation of pre-purchase quality expectations will determine consumer satisfaction and repurchase probabilities (Oliver, 1980).
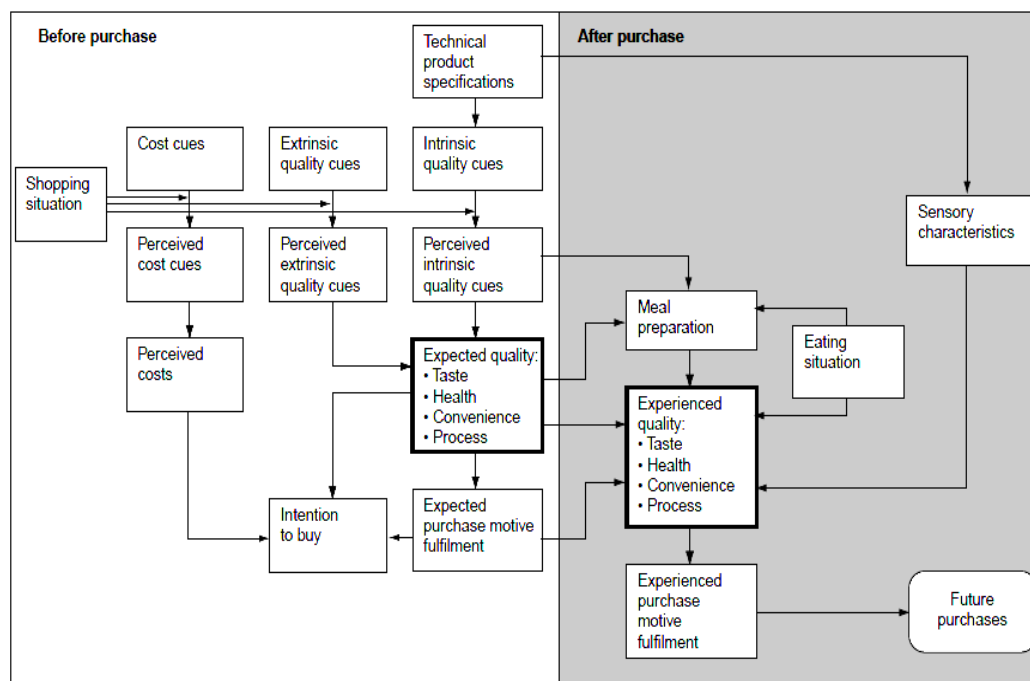
Figure 2.3: The Total Food Quality Model

Source: Brunso et al (2002).

2.7   QUALITY DIMENSIONS

The Total Food Quality Model views quality as a construct in the mind of the customer, and distinguishes between expected and experienced quality. In addition, it views quality as an abstract construct, inferred from informational cues and own experience, which instrumental for the attainment of purchase motives. Finally, quality has been regarded as multidimensional. (Brunso et al., 2002).

From the consumer's point of view, food quality-both expected and experienced-has five dimensions. These dimensions, which cover the major aspects of food quality found from numerous focus group studies (Grunert et al., 1996) appear to be universal at least in Western industrialised countries. We call them taste and appearance, health, convenience and process, price perception and willingness to pay and brands.

2.7.1 Taste: The Hedonic Dimension

Taste is and has always been one of the major criteria for evaluating food products. Taste is the most important but not the only, aspect in what we can call the hedonic quality dimensions of food. The term hedonic means 'to do with pleasure', and is related to the philosophy of hedonism, which holds that pleasure is the ultimate goal of all human behaviour. The hedonic aspects of food include appearance, smell, and especially and especially taste (Roininen et al., 1999).

Hedonic quality is an experience characteristic of food, since this dimension, especially taste, can often only be established after consumption. Thus, consumers have to form expectations about the hedonic quality of a food product to make a purchase decisions (Olson and Jacoby, 1972; Sttenkamp,1990).

Expectations of taste, for example, will be formed based on appearance, price, packaging, the store in which the product is bought, or other cues. Expectations can also be formed based on previous with the same product, or if the product is recognizable, for example by its brand name.

2.7.2 Health: The Invisible Dimension

From a consumer point of view, health involves two main dimensions: eating healthily and avoiding unhealthy foods. The first dimension, eating healthily, is related to nutritional aspects such as a healthy diet, functional foods, less fatty foods and other factors related to health and nutrition. The second dimension, avoiding unhealthy foods, deals with concerns about food safety (Brunso et al., 2002).

Both health dimensions express qualities of the food that customers cannot evaluate or judge by themselves, and are thus credence characteristics. Consumers do not usually, and do not expect to, feel healthier because they have eaten a product that is supposed to be good for them (Brunso et al., 2002).

Health is strongly linked to basic life values and purchase motives. At the same time, health is an invisible product characteristic and must therefore be inferred from more concrete intrinsic and extrinsic cues. How consumers mentally link concrete product attributes and other cues to perceived healthiness and other quality dimensions. Health literacy is defined as 'the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make health decisions' (Baker, 2006). Health literacy includes numeracy, media literacy, and cultural knowledge.

2.7.3   Convenience: The effort dimension

'Convenience' reflects a tendency to reduce the time and effort used to prepare and consume food. This can be accomplished in various ways. Examples include eating convenience foods, buying take-away meals, eating in (fast food) restaurants and using kitchen appliances. But convenience-related quality is related to more than just the time spent in the kitchen- it covers time and effort (mental and physical) spent buying, storing, preparing and consuming food (Gofton, 1995).

2.7.4 Price perception and willingness to pay

Intention to buy is usually discussed in terms of a trade-off between give and get components of the purchase i.e. perceived quality and perceived costs. Although price is the major cost cue, it has also been found to be an indicator of quality. Price appears as a relevant quality cue when consumers do not have adequate information about intrinsic quality cues, or when it is the only available cue (Zeithaml. 1988).

From the consumer's perspective, price is what is given up or scarified to obtain a product. Defining price as a sacrifice is consistent with conceptualizations by other pricing researchers (Chapman 1986; Mazumdar 1986) According to Monroe and Krishnan 1985, the use of price as an indicator of quality depends on availability of others cues to quality, price variation within a class of products, product quality variation within a category of products, level of price awareness of consumers, and Consumer's ability to detect quality variation in a group of product.

2.7.5   Brands and generic mark

Brand names, generic marks, and labelling schemes are all possible ways of providing consumers with additional information about food products. A generic mark is some sort of non-company specific symbol, which certifies that a product has certain characteristics. Consequently, rival brands can be endorsed if they apply to enter a mark's scheme and meet its standards.

2.8 CONCLUSION

This chapter provide some understanding and review of the study. The methodology must be designed by using the past research's information to answer the research question.

CHAPTER 3

METHODOLOGY

3.1   INTRODUCTION

This chapter describes the methodology designed follows by reviewed past researcher's studies. This chapter will include the framework for overall methodology. Besides that, the study population and sample data collection and data analysis method includes in this chapter.

This research is conducted to find out 3 in 1 instant packet drinks customer's perspective. The research started by identifying the problem statement, specifying the objectives and designing the scopes of work. In order to achieve the objectives of the research, questionnaire is designed by the author.

The questionnaire has been distributed to the target group via online. The target group   are the student who has been living in hostel.

3.2   RESEARCH FLOW CHART

Figure 3.1 shows the methodology flow chart. There are six main processes involved in this research. Each of these processes was explained in details in the next section.

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┌─────────────────────────────────────┐
│ IDENTIFICATION OF STUDY             │
│ POPULATION AND SAMPLE OF STUDY      │
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                  │
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┌─────────────────────────────────────┐
│ DESIGN OF QUESTIONNAIRE             │
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│ VALIDATION OF QUESTIONNAIRE         │
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              RELIABILITY
    NO          TEST
ALTERATION ◄──  0.6<a< 0.7
              Yes
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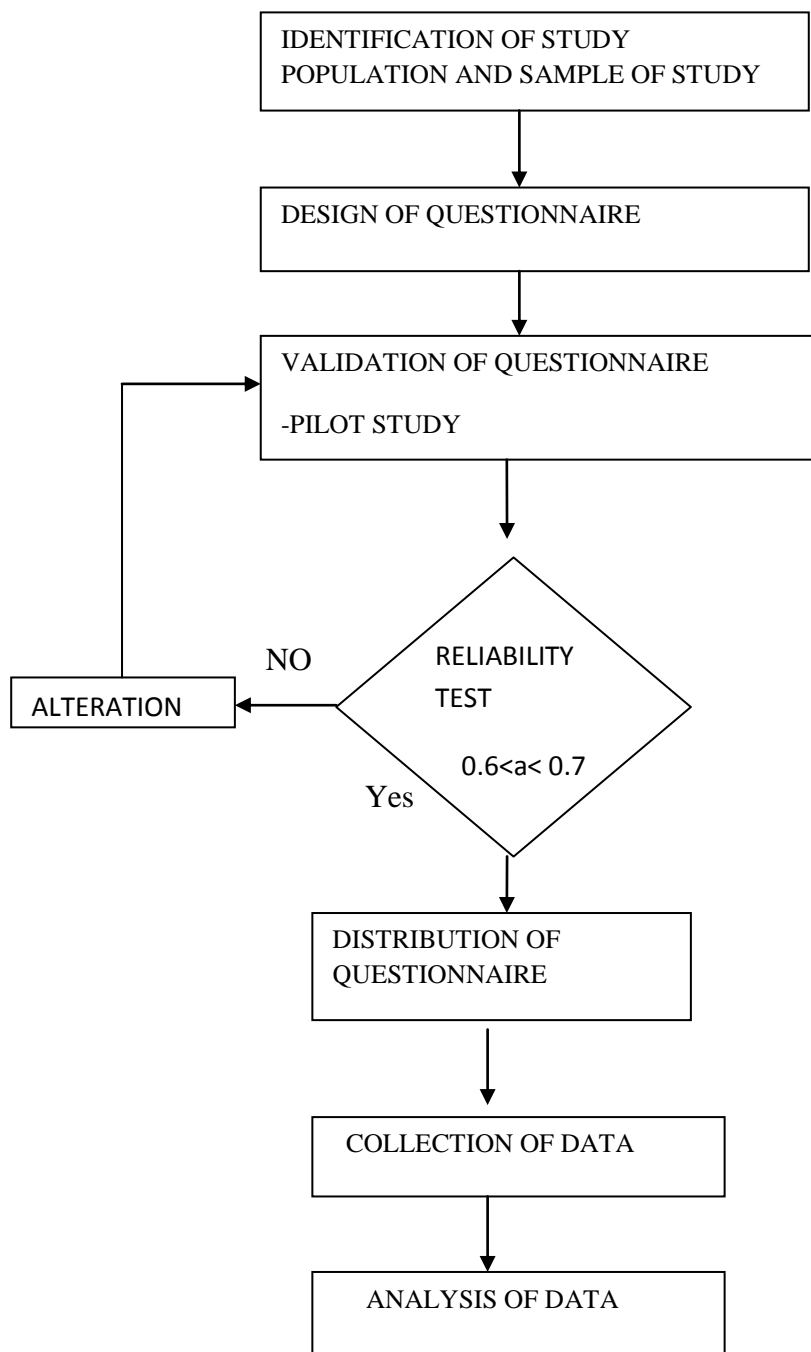
Figure 3.1: The Research Flowchart

3.3   IDENTIFICATION OF STUDY POPULATION AND SAMPLE OF STUDY

A population is defined as all elements that meet the sample criteria for inclusion in a study. The study population consisted of students who are living in hostel during their academic period.

A convenient sample of 100 respondents was selected. Sample has been defined as elements selected to find out about the total population from which they are taken. A convenient sample consists of subjects included in the study.

3.4   DESIGN OF QUESTIONNAIRE

A questionnaire is choosing as data collection method. The data of this research will be collect by distributed questionnaire to randomly chosen customer of the food product. The information obtained through questionnaire similar to interview but the question tend to be more simplify. The questionnaire consists of section A, B and C. Section A aimed to collect demographic information such as age and gender. Section B and C aimed to collect data that enable author to answer the research questions. Instruction guidelines were provided in each section to guide thru the respondents.

3.5   VALIDATION OF QUESTIONNAIRE

A pre-test through pilot study was carried out to find out the flaws and reliability of the questionnaire. When design a questionnaire its necessary to check whether the questions are clear to respondents or not. This pre-test was conducted by distributes printed form of the questionnaire face to face to 15 random respondents. The result of reliability test will be tested via SPSS. The results of reliability test was presented in the table form based on the SPSS output (Appendix A).

Reliability is the degree of consistency with which an instrument measures the attributes it is designed to measure. Reliability can be ensured by minimising data collector bias. Author minimising the data collector bias by being only one administer the questionnaire. The environment where the data collected was made comfortable by provides more privacy to the respondent. Respondents were requested to not write their name to ensure confidentially.

3.6 DISTRIBUTION OF QUESTIONNAIRE

After the process of alteration was done on the first draft of questionnaire, the final questionnaire (as attached in Appendix B) was distributed. Questionnaires were distributed via online document method knows as Google document. The author has sent the questionnaire thru Email to subjects. The data was collected over a month.

3.7 COLLECTION OF DATA

Data was collected through internet source. Author has chosen this method because it's required less time and energy. Besides that, since the subjects are students it's easier to contact them thru online. Students are basically will be busy with their studies, so online sources can let them complete the questionnaire when they wanted. Author personally feels that rushing to get information will not lead to the accurate opinion. And lastly, online sources also provide higher level privacy.

The respondents were given 10 to 15 minute to answer all the questions. Some respondents take more time to answer the questionnaire. The response was 100% since all the respondents answer all the questions according to the introduction. There is no questionnaire that been wrongly answer without follow the instruction provide.

3.8 ANALYSIS OF DATA

The data that have been collected was analysis via Statistical Package for Social Sciences (SPSS) and Microsoft Excel after organized. The data has been presented in graph and pie chart. The tables and pie charts were formed based on the SPSS output as tabulated in Appendix C.

3.7 CONCLUSION

Quantitative, descriptive survey design was used as research method for this study. The questionnaire was administered by the author to collect data form a convenient sample of 100 respondents. The respondents are students who are living in hostel during their academic period. The questionnaire was validated through pilot study and reliability test before distributed to the respondents. Also was used as research method for this research.

CHAPTER 4

DATA ANALYSIS AND DISCUSSION

4.1 INTRODUCTION

Chapter 4 presents the survey results and findings from the analysis conducted. This chapter begins with the discussion on the reliability test conducted. Followed by the discussion on the survey results which are divided into four sections which reflect the section in the questionnaire and research questionnaire.

4.2 RELIABILITY TEST AND CRONBACH'S ALPHA

Reliability can be expressed in terms of stability, equivalence, and consistency. Consistency check is a popular method, which is commonly expressed in the form of Cronbach Coefficient Alpha (Cronbach, 1951). The Cronbach's Alpha is used to measure the internal consistency (reliability) of the instrument. Reliability of an instrument shows the degree of consistency or repeatability of the measurement (Streiner, 2003).

Reliability test have carried out to check the reliability of the questionnaire. The initial questionnaire has been distributed to 15 random respondents face to face. The data has been collected and has been run for reliability test via SPSS software. Table 4.1 shows the reliability test result for the first run. The value of Cronbach's Alpha for 17 items is 0.590. According to Nunnaly (1978) a commonly-accepted rule of thumb is that a α of 0.6-0.7 indicates acceptable reliability, and 0.8 or higher indicates good reliability. This indicates that the questionnaire is in range of unsatisfactory reliability.

Table 4.1: Reliability Statistics -First Run

Number of Items (N)	Cronbach's Alpha
17	0.590

Therefore, based on the reliability test a result commends from pilot study some amendments were conducted on the first draft of questionnaire. Table 4.2 shows the alteration of questionnaire. After the alteration, the reliability test has been run again to test the new questionnaire. Table 4.3 shows the Cronbach's Alpha value of the questionnaire after the alteration. The second test results show that the Cronbach's Alpha value is 0.656. This indicates the questionnaire can be distributed.

Table 4.2: The Alteration of Questionnaire

Question Number	Initial Question	Final Question (After Alteration
6	Do you typically read the back and side panel of the product package before? a) Yes b) No c) Not sure	Do you typically read the Back and side panel of the product package before? a) Yes b) No
8	How many packets of instant drinks that You consume per day?	Removed

Table 4.3: Reliability Statistics- Final Run

Number of Item	Cronbach's Alpha
16	0.656

4.3   RESULTS AND FINDINGS

4.3.1 Part A: Respondent Background

The sample study of this study was students who are living in hostel during their academic period. A convenience sample total 100 respondents were response to this study. Figure 4.4 shows the frequency of respondent's age. There are 89 respondents' age was in range of 20-29. 6 respondents are in age range of 30-39 and 4 respondents are in age range of 19 and under. There is one respondent who is in age range of 40 and above.
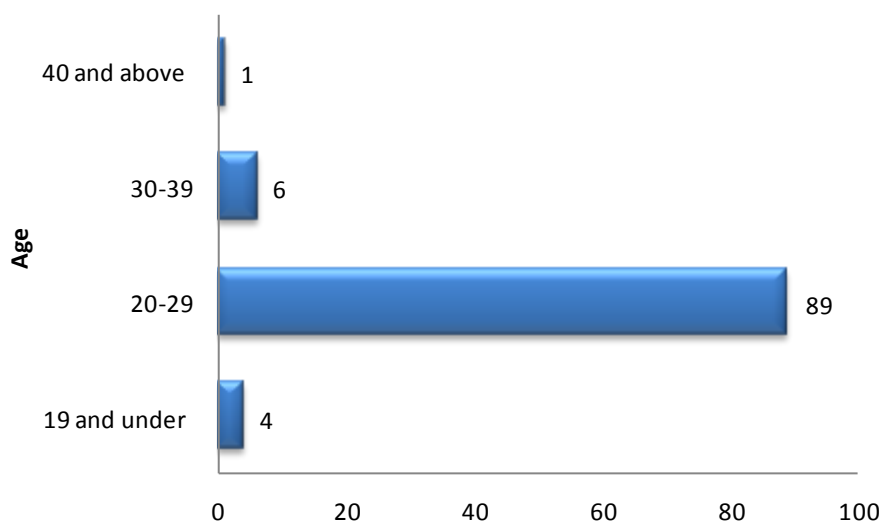
Figure 4.4: Frequency of Respondents' Age

Table 4.5 shows the frequency of respondent's gender. From the total 100 respondent, 66 respondents were female and 34 were male. The respondents were student. There are there types of students who are living in hostel. There are known as Diploma students, Undergraduates and Postgraduates. Figure 4.6 shows the percentage distribution of the education level of respondents. 58 respondents are undergraduates, 22 are postgraduates and the rest are diploma students.
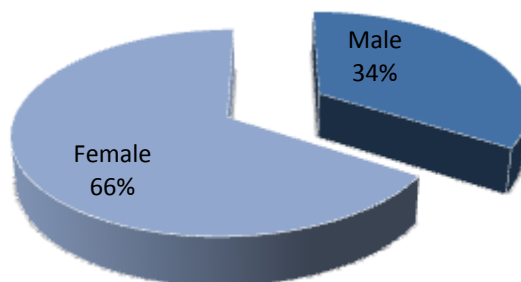
Figure 4.5: Percentage Distribution of Respondents' Gender
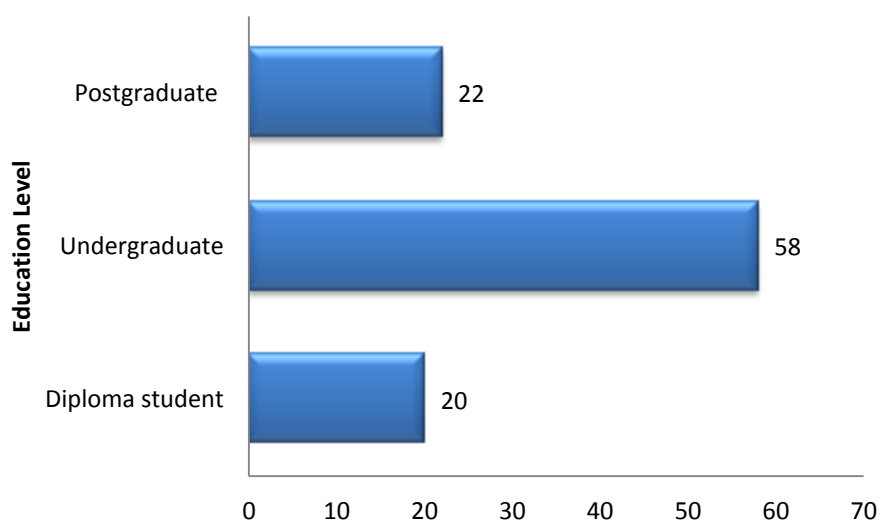
Figure 4.6: Percentage Distribution of Respondents' Education Level

4.3.2 Part B: General View of 3 in 1 Instant Packet Drink

There are total 100 respondents have been asked to ask the questionnaire about the 3 in 1 instant packet drinks. From the survey conducted, there are 48% of respondents somewhat familiar with the 3 in 1 instant packet drinks. The 48% respondents were using the product only sometimes. 52% of the respondents using the 3 in 1 instant packet drinks on regular basic. The figure 4.7 shows the percentage respondents who are somewhat familiar and very familiar to the 3 in 1 instant packet drinks.
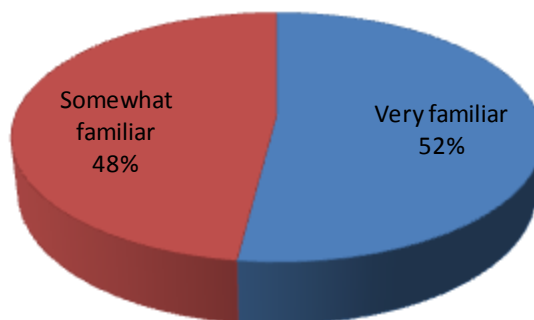
Figure 4.7: Percentage of How Well Respondents' Familiar to 3 in 1 instant Packet Drinks

There is always has some attributes that make the customer to try new product in market. There are some attributes or features that enticed customer to try 3 in 1 instant packet drinks. 57 percentage of respondents said that they choose the product at first time because it's readily available. 3 in 1 instant packet drinks readily available at every shop because of its large market and retailers. Most of the shops in the campus area might not sell main ingredients for make drinks like sugar, milk. Sometimes, it will be more than normal price. These 3 in 1 packets are readily available at shops.

18 percentage of respondents said that they try the 3 in 1 product because its solves problems. Respondents might have problem to make own drinks at their hostel. Student might have limited time to make drinks for them due to their busy life and packed academic schedule. Three main ingredient needs to make drinks. Even if they out of one of the ingredients, they might not able to make drinks. Thus, since this 3 in 1 instant packet drinks consists of all the three main ingredients. Table 4.8 shows the attributes that enticed the respondents to try the product for first time.

Table 4.8: Attributes that Enticed to Try the 3 in 1 Instant Packet Drinks

Attributes	Number of Respondent
Best quality	3
Just what I need/looking for	8

Mainly because of the advertisement	1
Price Value	5
Readily available	57
Recommended by family/friends	8
Solves problem	18

Customer will have requirement on every product they purchasing. The requirements decide whether the customer require the certain product. Manufacturers focus to these requirement and try to fulfil those requirement. The main requirement of respondents toward the 3 in 1 instant packet drinks is that the product must quicker and easier to prepare. 87 percentages of respondents said that they wants 3in 1 instant drinks because it's quicker and easier to prepare. Only 3 percentages of respondents said that they using the product for health benefits. It can say that there is a least significant health benefit from the 3in 1 instant packet drinks. Cheaper, taste or aromatic content are the other requirement chosen by 3 and percentage respectively. The table 4.9 shows the customer's needs for the product and its frequency.

Table 4.9: Respondents' Requirement of 3in 1 Instant Packet Drinks

Requirement	Number of respondent
Cheaper	3
Health Benefits	3
Quicker/easier to prepare	87
Taste/aromatic content	4
Others	3

Figure 4.10 shows the percentage of how often the respondents using the 3 in 1 instant packet drinks. 33 percentage of respondents using the product weekly while 28 percentage of respondents using it when there is no other choice. The percentage of respondents who are using daily is 23 percentage while 16 percentage respondents consume it less than monthly.
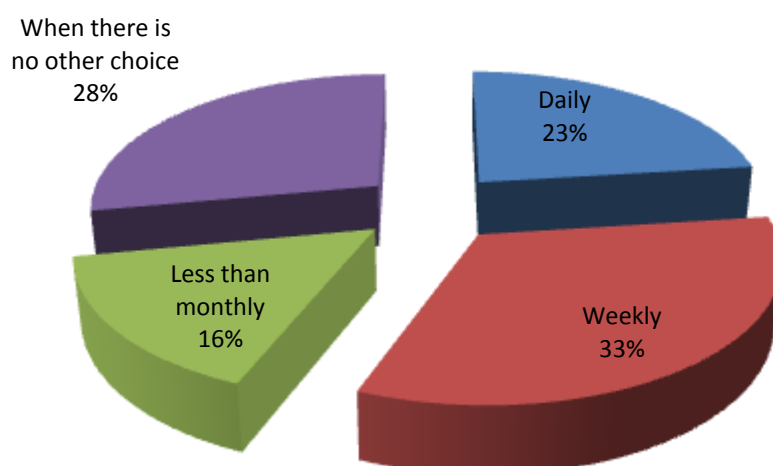
Figure 4.10 The Percentage of How often Respondents' using the

3 in 1 Instant Packet Drinks

Respondent make comparison between instant drinks and own make drinks. Own make drinks are direct competitors for instant drinks. Table 4.11 shows the comparison between instant drinks and own make drinks. 62 respondents said that the taste of 3 in 1 instant packet drinks not as much as own make drinks. Own make drinks taste better for the respondents. Only 17 respondents feel the instant coffee is better whereas the other 12 respondents said that the tastes of both are about the same. 9 respondents are cannot feel the different and they not sure about the taste.

Table 4.11: Comparison of Own Make Drinks and Instant Drinks

Comparison	Number of respondents
About the same	12
Instant coffee is better	17
Not sure	9
The taste not as much as own make drinks	62
Others	0

The comparison of instant drinks and owns make a drink is shows the satisfaction of customers toward the instant. Figure 4.12 shows the percentage of respondent's satisfaction level. 78 percentages of respondents were only partially satisfied with the current 3 in 1 instant packet drinks. Partially satisfaction option is given to respondents because customers sometimes feels so hard state their satisfaction level toward the product. They might not fully not satisfy with the product. 12 percentages of respondents fully satisfied with the product and 10 percentages of respondents are not satisfied at all.
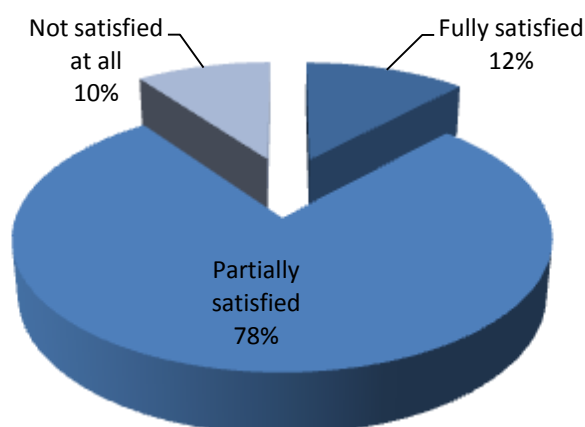
Figure 4.12: Percentage of Respondents' Satisfaction Level

4.3.3 Part C: Food Quality Dimensions

Food quality is the criteria which customer evaluates the product based on both expected and experienced. Food quality has few dimensions to evaluate the product. Five dimensions were selected for customer's evaluation on 3 in 1 instant packet drinks based on literature review. The five dimensions are taste, shelf life, health price and brand. Respondents were asked to evaluate and range each food quality dimension from the range of 1(not important) to 5(very important). The most important dimension was determined by the compare the mean of five of the quality dimensions.

4.3.3.1 Taste

From the total 100 respondents, 36 respondents said that the taste is a important criteria to evaluate the quality of the 3 in 1 instant packet drinks. 32 respondents said that it's important whereas 23 respondents is prefer been neutral. Only 8 and 1 respondents state that it's not important and not important all respectively. Figure 4.15 taste as a 3 in 1 instant packet drink quality dimension
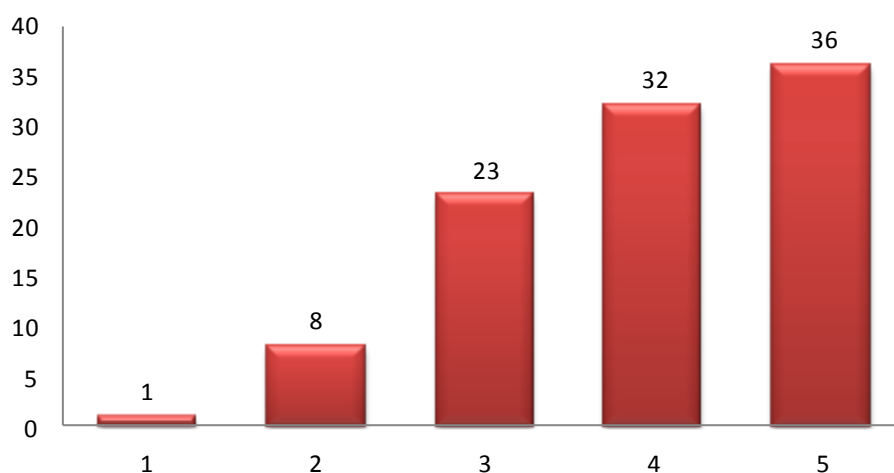
Figure 4.13: Taste as a 3 in 1 Instant Packet Drink Quality Dimension

4.3.3.2 Shelf Life

Shelf life is the second food quality dimension. Total of 63 respondents said that the dimension is very important whereas 17 respondents said that it's important. 14 respondents stay neutral while 6 respondents said that it's not important. None of the respondents said that the shelf life dimension is not important at all. Figure 4.16 shows shelf life as a 3 in 1 instant packet drink quality dimension.
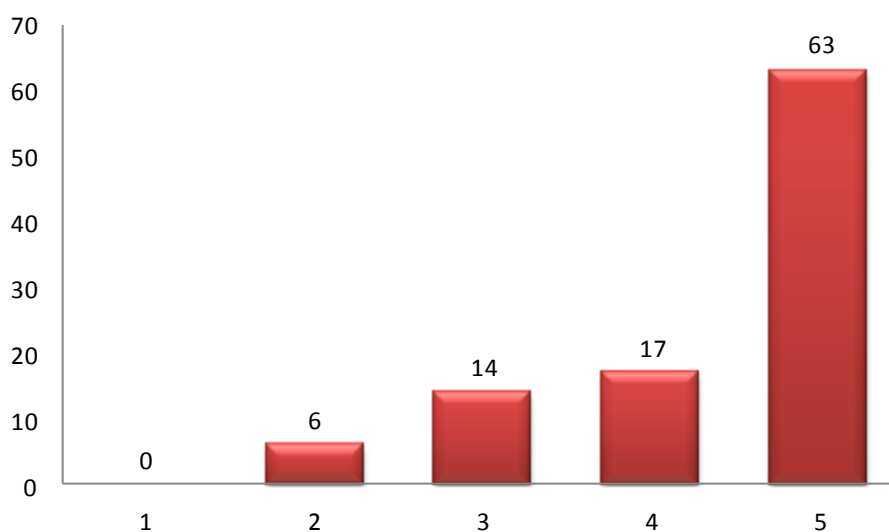
Figure 4.14: Shelf Life as a 3 in 1 Instant Packet Drink Quality Dimension

4.3.3.3 Health

Health includes in the food quality dimension. None of the respondents said that the food quality is not important dimensions at all. 59 respondents were stated that health dimension is very important in selecting 3 in 1 instant packet drink. Besides that majority of the respondent (63%) very concerned about the sugar content in 3 in 1 instant packet drink by read the side and back panel of the packet to get the nutrition fact. Whereas 27 respondents feel that the health is an important dimension. Another 4 and 10 respondents said that the dimension is not important at all and feel neutral respectively. Figure 4.17 shows health as 3 in 1 instant packet drink quality dimension
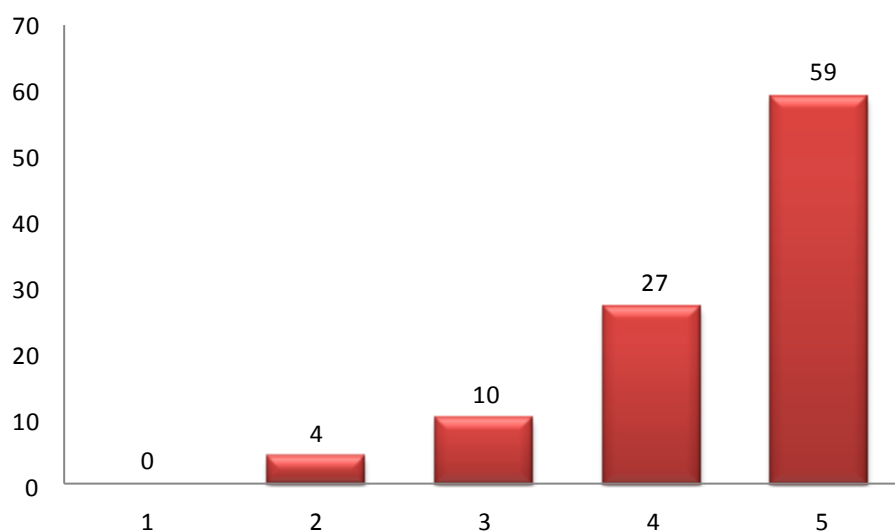
Figure 4.15: Health as a 3 in 1 Instant Packet Drink Quality Dimension

4.3.3.4 Price

Price is the one of the food quality dimension. 4 of the respondents said that the food quality is not important dimensions at all. 36 respondents were stated that the dimension is the very important dimension. Whereas 26 respondents feel that the health is an important dimension. 29 respondents feel neutral about the dimension. Whereas 4 and 5 feel it's not important and not important at all respectively. Figure 4.18 shows price as a 3 in 1 instant packet drink quality dimension.
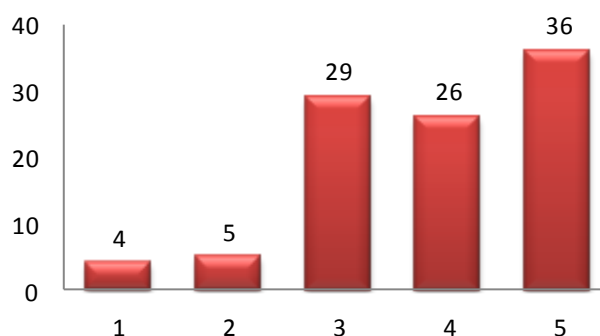
Figure 4.16: Price as a 3 in 1 Instant Packet Drink Quality Dimension

4.3.3.5 Brand

Price is the last food quality dimension of 3 in 1 instant packet drinks. 7 of the respondents said that the food quality is not important dimensions at all. Only 29 respondents were stated that the dimension is the very important dimension. Whereas 26 respondents feel that the brand is an important dimension. 30 respondents feel neutral about the dimension.26 respondents feel that the brand criterion is an importance dimensions. Figure 4.19 shows brand as a 3 in 1 instant packet drink quality dimension.
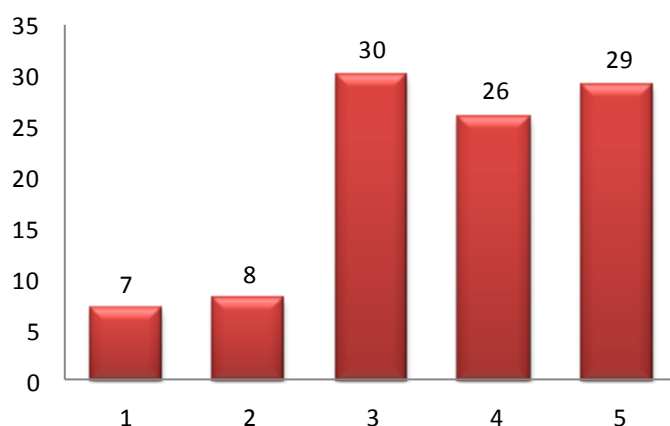
Figure 4.17: Brand as a 3 in 1 Instant Packet Drink Quality Dimension

4.4.3.6 Most Important Criteria for Selection of 3 in 1 Instant Drinks

Table 4.20 shows the mean of importance range chosen by the respondents to each dimensions. The range of importance is between 1(not important at all) and 5(very important). Taste and price dimension have the five as the highest mean. Taste and price is the very important dimension whereas brand is the important dimension. Respondents are neutral about health and shelf life.

Table 4.18: The Mean of Importance Range of Food Quality Dimension

Food quality dimension	Mean
Taste	3.94
Shelf Life	3.37
Health	3.40

Price	3.85
Brand	3.62

Taste and price are the very important dimension or criteria of 3 in 1 instant packet drinks according to the respondents. As the taste, customer needs the drinks to have a better and aromatic taste. This study is focus on students. Thus, price is the very important dimension for the respondents. Student needs more cheaper and affordable price. Respondents have rate health as the very neutral criteria. This shows that respondents did not concern about the health risks by consuming the 3 in 1 instant packet drinks.

4.4.3.7   Correlation of quality dimension

Table 4.17 shows the correlation between the quality dimensions of 3 in 1 instant packet drinks. There are five food quality dimensions. For taste, it can be seen that shelf life, health and price are significantly correlate. Taste, health and brand are significantly related to shelf life. Shelf life, taste, price and brand are significantly correlate to health. Whereas price is significantly correlate to taste, health and brand. Brand is significantly correlate to shelf life, price and health.

Table 4.19: The Correlation between the Quality Dimensions of 3 in 1Instant Packet Drink

	TASTE	SHELF LIFE	HEALTH	PRICE	BRAND
TASTE	1				
SHELF LIFE	$.324^{**}$	1			
HEALTH	$.316^{**}$	$.501^{**}$	1	.	
PRICE	$.424^{**}$	$.251^{*}$	$.373^{**}$	1	
BRAND	$.218^{*}$	$.318^{**}$	$.295^{**}$	$.336^{**}$	1

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

*. Correlation is significant at the 0.05 level (2-tailed).

4.4   CONCLUSION

This chapter answer the research question with the data that have been analysis through SPSS. The main requiremnent of customer of the 3 in1 instant packet drinks is to the drinks to be quick and easy to prepare. The readily available feature enticed customer to try the 3 in 1 instant packet drinks at first time. Customer evaluated the 3 in 1 instant packet drinks based on five food quality dimensions. Customer need the better and aromatic taste drinks and cheaper and affortable price. Customer also evaluate the product based on the health faactor. It seems that customer does not take it as a importance criteria when choosing the 3 in 1 instant drinks. The customer's satisfaction level was evaluated based on the comparison of the instant drinks and own make drinks. Its shows that most of the respondents are partially satisfied with the product.

CHAPTER 5

CONCLUSION AND RECOMMENDATION

5.1 INTRODUCTION

The purpose of this chapter is to conclude the discussion related to this study. Discussion is made by analysis the data gain by 100 respondents. Recommendations for further research and possible studies were concluded this chapter. The data analysis used to answer the three research questions to reach the objective of study.

5.2 CONCLUSION OF FINDINGS

The purpose of this study is to find the customer's perception on 3 in 1 instant packet drinks. 3 in 1 instant packet drinks are one type of instant drinks which are famous in Asian. There are lot types of 3 in 1 instant packet drinks. Instant drinks are means to short down the time of coffee preparation. This study is carried out among the students who are living in hostel during their academic period. The instant drinks are not famous for home usage since there is no need for rush preparation. Student living in a busy and packed schedule and there have no time to prepare drinks. Thus they prefer for a very quicker preparation method. They just have to add hot water to the mix and can have a cup of coffee in few seconds.

The first research question is aimed to find out the extend of respondents' usage of the 3 in 1 instant packet drinks. Most of the respondents are very familiar with the product. This is means that they using the product very frequency. Besides that, majority of the students using the product by weekly. Based on the data collected, the students need the 3 in 1 instant packet drinks because its can be prepared quicker and easier to prepare. There will be always some attributes to entice the customer to try a product at first time. As for the student the characteristics of readily available and solves

problem make them to try at first time. Most of the students are partially only satisfied with the current 3 in 1 instant packet drink.

Besides that, most of customer realise that the higher sugar content of 3 in 1 instant packet drinks. Even though, the awareness of health is higher among the customer, but they still using the instant drinks due to their needs. Customer mention that the taste not as much as the own make drinks where the amount of each ingredient of instant packet drinks are fixed. Customer has not got choice to customaries their drinks according to their need of sugar. Customer has complained for the least taste of instant drink

Taste, shelf life, health, price and brand are the food quality dimensions that evaluate the product. Customer had place the taste price and brands as the important criteria whereas brands as the second important. As student, the price dimension is important for them because they are living in budget life. Students concerns about the brands because they might think of the cost of switch brand. It shows that they are certain brand that already established its image as the best instant packet drinks manufacturer. Health is not an importance or the last criteria they concern about when selecting the 3 in 1 instant packet drinks. Even though, most of the students realise the higher sugar contents of the 3 in 1 instant packet drinks but they still consume it. This is mainly because the 3 in 1 instant packet drinks are the only solution for their problem. The ignorance of the health concern maybe causes serious illness to their health.

Manufacturer must focus on the taste content to make further improvement of the product. The 3 in 1 instant drinks definitely need and significant improvements by take concerns of the customers.

Since, 3 in 1 instant drinks is the only solution for quicker and easier drink making product, manufacturer has big scope of business opportunity. Besides students, instant drinks are popular at workplace. Manufacturer must try to gain more user group other than students and workplace usage.

**5.3   RESEARCH CONTRIBUTION TOWARDS THEORY AND
         INDUSTRY DEVELOPMENT**

Customer perception plays vital role determining the discussion regarding product development. This research can be form a stepping stone for product development of drinks products. Previous study suggests that customer evaluate a product based on quality dimensions. Food manufacturer need to focus more on the food quality dimensions when discuss about product development. This research can provide the basic of survey method. Quality Function Deployment is a product development methodology that used in most industries. The first step of QFD is to find out the customer's requirement.

Besides that, the business of instant drinks has biggest scope since it cheaper solution for quicker preparation. Customer, who could not afford for a coffee machine, depends on instant drinks for the solution. If manufacturer are clear about customer's current complain and dissatisfaction, might help to develop their business. The newcomer manufacturer should use the opportunity to develop the product and make it as first mover.

5.4   LIMITATION OF STUDY

This research is aim to find out the customer's perception on 3 in 1 instant packet drinks. They are few limitations for this study. The exact ratio of ingredients is off the topic since it's the manufacturer's confidential information.

5.5   RECOMMENDATION FOR FURTHER RESEARCH

The following recommendations are offered as possible ways to improve this study online document method maybe not the effective medium to study the customer's perception.

For further research, the manufacturing information of the product might help to identify the customer perception even more deep. Thus, the collaboration or information direct from the manufacture is essential for further research.

5.6   CONCLUSION

The research has achieved its stated objectives; however, much further research needs to be carried out. It is hoped, the present work been able to contribute to the enrichment of knowledge with regards to 3 in 1 instant packet drinks research and may benefits to the manufacturer in continuously improve their quality of product to be good taste and healthy.

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APPENDIX A: SPSS DATA OUTPUT (RELIABILITY TEST)

First Run

Case Processing Summary

		N	%
Cases	Valid	15	100.0
	Excluded[a]	0	.0
	Total	15	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.590	17

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Q1	27.93	17.210	.000	.593
Q2	28.07	15.352	.629	.544
Q3	28.93	17.210	.000	.593
Q4	28.47	15.695	.305	.565
Q5	27.07	15.210	.430	.549
Q6	28.00	16.857	.135	.587
Q7	27.87	10.981	.584	.469
Q8	28.20	16.600	.107	.589
Q9	28.67	16.238	.207	.578
Q10	27.07	15.352	.224	.574
Q11	28.27	14.495	.496	.532
Q12	25.47	15.552	.188	.580
Q13	26.07	18.067	-.219	.656
Q14	25.67	14.238	.282	.563
Q15	25.27	16.781	.048	.596
Q16	25.53	15.124	.178	.586
Q17	26.40	14.829	.219	.577

Second Run

Case Processing Summary

		N	%
	Valid	15	100.0
Cases	Excluded[a]	0	.0
	Total	15	100.0

a. Listwise deletion based on all variables in the

procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.656	16

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Q1	25.07	18.067	.000	.659
Q2	25.20	16.171	.626	.619
Q3	26.07	18.067	.000	.659
Q4	25.60	16.686	.264	.642
Q5	24.20	16.029	.428	.625
Q6	25.13	17.552	.207	.651
Q7	25.00	11.857	.560	.578
Q8	25.33	17.238	.163	.652
Q9	25.80	17.314	.143	.654
Q10	24.20	15.886	.275	.640
Q11	25.40	15.686	.409	.623
Q12	22.60	15.686	.311	.634
Q13	22.80	14.886	.304	.638
Q14	22.40	17.400	.105	.658
Q15	22.67	15.667	.218	.653
Q16	23.53	15.695	.211	.654

FACULTY OF TECHNOLOGY

A STUDY ON FOOD QUALITY DIMENSIONS OF 3 IN 1

INSTANT PACKET DRINK

Dear Sir/Madam,

I am pleased to inform that I am a degree student doing research entitled as above. Enclosed with this letter is a questionnaire that asks a variety of questions about your usage of 3 in 1 instant drinks. Please take a few minutes to complete this questionnaire. Your participation is quite valuable and greatly appreciated. And all the feedbacks from this survey will be kept confidential and you will not be contacted about the results unless you so desire. We are sincerely grateful for you taking the time to help us to further conduct this project research and hope that our research results could help the respective food manufacturer to make some improvement on their product.

Changkari a/p Ravindran
Faculty of Technology University Malaysia Pahang

APPENDIX B: QUESTIONNAIRE

PART A: DEMOGRAPHIC INFORMATION

This section consists of 3 questions. Please do answer the entire question.

1. Please choose your respective age group.

- ○ 19 and under
- ○ 20 - 29
- ○ 30 - 39
- ○ 40 - 49
- ○ 50 - 59
- ○ 60 +

2. Gender:

- ○ Male

- ○ Female

3. You are currently

○ Diploma Student

○ Undergraduates

○ Postgraduates

PART B: GENERAL VIEW OF 3 IN 1 INSTANT PACKET DRINK

This section consists of 8 questions.

1. How familiar are you with 3 in 1 packet instant drink?

○ Very familiar (use on regular basic)

○ Somewhat familiar (use it only sometimes)

2. Which of the following attribute enticed you to try the 3 in 1 packet instant drinks at first time?

○ Price value	○ mainly because of the advertisement
○ Solves problem	○ Recommended by family/friends
○ Readily available	○ others -----------------------

○ Best quality

○ Just what I need/ looking for

3. Why do you need this 3 in 1 packet instant drink?

○ Cheaper

○ Quicker/easier to prepare

○ Health benefits

○ Taste/aromatic content

○ Others --------------------

4. How often do you typically use the 3 in 1 packet drink per (Day, Week, Month, Est.?)

○ Daily

○ Weekly

○ Less than monthly

○ When there is no other choice

○ Others -----------------------

5. Do you typically read the back and side panel of the product package before?

○ Yes

○ N0

6. Do you aware of the higher sugar content in 3 in 1 packets instant drinks?

○ Yes   ○ No

7. Based on your experience, how do instant drinks compare to fresh own make drinks?

○ Instant coffee is better

○ About the same

○ The taste not as much as own makes drinks

○ Not sure

○ Others---------------------

8. Overall how satisfied are you with the product?

○ Fully satisfied

○ Partially satisfied

○ Not satisfied at all.

PART C: FOOD QUALITY DIMENSIONS

There are criteria or characteristic of the 3 in 1 packet instant drink. Please rate it according to which criteria is important to least important when choosing your respective 3 in 1 packet drinks.

For those participate who have never use the product before, please rate it according to which criteria will you give important in case you wanted to try these 3 in 1 packet instant drinks.

This rating will be useful for manufacturer of the instant drinks to make further improvement.

Please rate according to this:

1-Not important at all 2-Least important 3. Neutral4. Important 5. Very important

LEVEL AGGREMENT

Criteria	1	2	3	4	5
1. Taste					
2. Shelf Life (expired date)					
3.Health factor (sugar content)					
4.Price (more cheaper price)					
5. Brand					

APPENDIX C: SPSS DATA ANALYSIS

PART A: DEMOGRAPHIC PART

QUESTION 1

		Frequency	Percent	Valid Percent	Cumulative Percent
	19 and under	4	4.0	4.0	4.0
	20-29	89	89.0	89.0	93.0
Valid	30-39	6	6.0	6.0	99.0
	40 and above	1	1.0	1.0	100.0
	Total	100	100.0	100.0	

QUESTION 2

		Frequency	Percent	Valid Percent	Cumulative Percent
	Female	66	66.0	66.0	66.0
Valid	Male	34	34.0	34.0	100.0
	Total	100	100.0	100.0	

QUESTION 3

		Frequency	Percent	Valid Percent	Cumulative Percent
	DIPLOMA STUDENT	20	20.0	20.0	20.0
	POSTGRADUATE	22	22.0	22.0	42.0
Valid	UNDERGRADUATE	58	58.0	58.0	100.0
	Total	100	100.0	100.0	

PART B: General view of 3 in 1 Instant Packet Drink

QUESTION 1

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	somewhat familiar(use it only sometimes)	48	48.0	48.0	48.0
	Very familiar (use on regular basic)	52	52.0	52.0	100.0
	Total	100	100.0	100.0	

QUESTION 2

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Best quality	3	3.0	3.0	3.0
	Just what I need/looking for	8	8.0	8.0	11.0
	Mainly because of the advertisement	1	1.0	1.0	12.0
	Price value	5	5.0	5.0	17.0
	Readily available	57	57.0	57.0	74.0
	Recommended by family/friends	8	8.0	8.0	82.0
	Solves problem	18	18.0	18.0	100.0
	Total	100	100.0	100.0	

QUESTION3

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Cheaper	3	3.0	3.0	3.0
	Health benefits	3	3.0	3.0	6.0
	Others	3	3.0	3.0	9.0
	Quicker/easier to prepare	87	87.0	87.0	96.0
	Taste/aromatic content	4	4.0	4.0	100.0
	Total	100	100.0	100.0	

QUESTION4

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Daily	23	23.0	23.0	23.0
	Less than monthly	16	16.0	16.0	39.0
	Weekly	33	33.0	33.0	72.0
	When there is no other choice	28	28.0	28.0	100.0
	Total	100	100.0	100.0	

QUESTION5

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	51	51.0	51.0	51.0
	Yes	49	49.0	49.0	100.0
	Total	100	100.0	100.0	

QUESTION6

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	No	37	37.0	37.0	37.0
	Yes	63	63.0	63.0	100.0
	Total	100	100.0	100.0	

QUESTION 7

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	About the same	12	12.0	12.0	12.0
	Instant coffee is better	17	17.0	17.0	29.0
	least tastier	1	1.0	1.0	30.0
	Not sure	9	9.0	9.0	39.0
	prefer to serve fresh own make drinks	1	1.0	1.0	40.0
	Self made drinks taste better	1	1.0	1.0	41.0
	The taste not as much as own make drinks	59	59.0	59.0	100.0
	Total	100	100.0	100.0	

QUESTION8

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Fully satisfied	12	12.0	12.0	12.0
	Not satisfied at all	10	10.0	10.0	22.0
	Partially satisfied	78	78.0	78.0	100.0
	Total	100	100.0	100.0	

Part C: Food Quality Dimensions

Statistics

TASTE

N	Valid	100
	Missing	0
Mean		3.94

TASTE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	1	1.0	1.0	1.0
	2.00	8	8.0	8.0	9.0
	3.00	23	23.0	23.0	32.0
	4.00	32	32.0	32.0	64.0
	5.00	36	36.0	36.0	100.0
	Total	100	100.0	100.0	

Statistics

SHELFLIFE

N	Valid	100
	Missing	0
Mean		3.37

SHELF LIFE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.00	6	6.0	6.0	6.0
	3.00	14	14.0	14.0	20.0
	4.00	17	17.0	17.0	37.0
	5.00	63	63.0	63.0	100.0
	Total	100	100.0	100.0	

Statistics

HEALTH

N	Valid	100
	Missing	0
Mean		3.40

HEALTH

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2.00	4	4.0	4.0	4.0
	3.00	11	11.0	11.0	15.0
	4.00	26	26.0	26.0	41.0
	5.00	59	59.0	59.0	100.0
	Total	100	100.0	100.0	

Statistics

PRICE

N	Valid	100
	Missing	0
Mean		3.85

PRICE

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	4	4.0	4.0	4.0
	2.00	5	5.0	5.0	9.0
	3.00	29	29.0	29.0	38.0
	4.00	26	26.0	26.0	64.0
	5.00	36	36.0	36.0	100.0
	Total	100	100.0	100.0	

Statistics

BRAND

N	Valid	100
	Missing	0
Mean		3.62

BRAND

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1.00	7	7.0	7.0	7.0
	2.00	8	8.0	8.0	15.0
	3.00	30	30.0	30.0	45.0
	4.00	26	26.0	26.0	71.0
	5.00	29	29.0	29.0	100.0
	Total	100	100.0	100.0	

Correlations

		TASTE	SHELFLIFE	HEALTH	PRICE	BRAND
TASTE	Pearson Correlation	1	.324**	.316**	.424**	.218*
	Sig. (2-tailed)		.001	.001	.000	.029
	N	100	100	100	100	100
SHELFLIFE	Pearson Correlation	.324**	1	.501**	.251*	.318**
	Sig. (2-tailed)	.001		.000	.012	.001
	N	100	100	100	100	100
HEALTH	Pearson Correlation	.316**	.501**	1	.373**	.295**
	Sig. (2-tailed)	.001	.000		.000	.003
	N	100	100	100	100	100
PRICE	Pearson Correlation	.424**	.251*	.373**	1	.336**
	Sig. (2-tailed)	.000	.012	.000		.001
	N	100	100	100	100	100
BRAND	Pearson Correlation	.218*	.318**	.295**	.336**	1
	Sig. (2-tailed)	.029	.001	.003	.001	
	N	100	100	100	100	100

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

*. Correlation is significant at the 0.05 level (2-tailed).

APPENDIX D

WEEKS

No	Research Activity	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1	Brainstorm topic	■													
2	E-library search for journal articles		■												
3	Write outline of report proposal			■											
4	write up report proposal				■										
5	Consultation of proposal and report proposal					■									
6	Discuss contents of Chapter 1,2 and 3						■								
7	Write up chapter 1,2 and 3							■							
8	Proofreading Chapters 1,2 and 3								■						
9	Discuss data collection instrument									■					
10	Administer questionnaire										■				
11	Data entry and analysis											■			
12	Discussion of findings,conclusion, and recommendations												■		
13	Write up Chapter 4													■	
14	Write up Chapter 5													■	
15	Compliling and proofreading final report														■

Ghant Charts